

VIRTUAL UNIVERSITY OF PAKISTAN

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

(Final Term Past Paper)

MADE AND SOLVED BY TEAM HADI

WARNING: Team HADI is not responsible for any mistake or wrong answer. All students reading and using this document may check and confirm the answers at their own.



WhatsApp: 03087122922



FACEBOOK ID: <https://www.facebook.com/hadipastpapers/>

Best of luck!



Question No : 1 of 52

Marks: 1 (Budgeted Time 1 Min)

Suppose that a graph $G = (V, E)$ is implemented using adjacency lists. What is the complexity of a breadth-first traversal of G ?

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

Answer (Please select your correct option)

$O(|V|^2)$

$O(|V| + |E|)$

$O(|V|^2|E|)$

$O(|V| + |E|)$



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahor)

Question No : 2 of 52

Marks: 1 (Budgeted Time 1 Min)

Non-optimal or greedy algorithm for money change takes _____

Answer (Please select your correct option)

$O(kN)$

$O(2^k)$

$O(N)$

$O(k)$



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

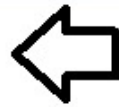
Question No : 3 of 52

Marks: 1 (Budgeted Time 1 Min)

The Huffman algorithm finds a (n) _____ solution.

Answer (Please select your correct option)

Optimal



Non-optimal

Exponential

Polynomial

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL-03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 4 of 52

Marks: 1 (Budgeted Time 1 Min)

Using ASCII standard the string "abacdaacac" will be encoded with _____ bits.

Answer (Please select your correct option)

80



correct answer
solved by hadi

160

320

100

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 5 of 52

Marks: 1 (Budgeted Time 1 Min)

Consider the string "abacdaacac" if the string is coded with ASCII codes using Huffman encoding scheme, the message length would be

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

Answer (Please select your correct option)

8 bits

80 bits

Less than 50 bits

More than 50 bits

correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI

Question No : 6 of 52

Marks: 1 (Budgeted Time 1 Min)

Random access machine or RAM is a/an

Answer (Please select your correct option)

Machine build by Al-Khwarizmi

Mechanical machine

Electronics machine

Mathematical model



correct answer
solved by hadi

MADE BY HADI

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

In order to say anything meaningful about our algorithms, it will be important for us to settle on a _____.

Answer (Please select your correct option)

C++ program

Java program

Pseudo program

Mathematical model of computation



correct answer
solved by hadi

MADE BY HADI

Question No : 8 of 52

Marks: 1 (Budgeted Time 1 Min)

Divide-and-conquer involves breaking the problem into a small number of

Answer (Please select your correct option)

Sub problems



correct answer
solved by hadi

Selection

pivot

Sieve

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 9 of 52

Marks: 1 (Budgeted Time 1 Min)

Quick sort procedure was invented by

Answer (Please select your correct option)

Hoare



Sedgewick

Mellroy

Coreman

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI


Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 10 of 52

Marks: 1 (Budgeted Time 1 Min)

In Bucket sort, if there are duplicates then each bin can be replaced by a

Answer (Please select your correct option)

- Linked list  correct answer solved by hadi Correct Answer solved by hadi
- Heap
- Hash table
- Stack

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

In in-place sorting algorithm is one that uses no _____ arrays for storage.

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

Answer (Please select your correct option)

two dimensional

three dimensional

n dimensional

additional



correct answer
solved by hadi

MADE BY HADI

A $p \times q$ matrix A can be multiplied with a $q \times r$ matrix B. The result will be a $p \times r$ matrix C. In particular, for $1 \leq i \leq p$ and $1 \leq j \leq r$,

Answer (Please select your correct option)

$C[i, j] = \sum_{k=1}^q A[i, k]B[k, j]$



correct answer
solved by hadi

$C[i, j] = \sum_{k=1}^q A[k, i]B[k, j]$

$C[i, j] = \sum_{k=1}^q A[k, i]B[j, k]$

None of these

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL-hadirajputofficial@gmail.com
WHATSAPP & CALL-03087122922

MADE BY HADI

Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Question No : 13 of 52

Marks: 1 (Budgeted Time 1 Min)

For a given chain of matrices A_1, A_2, A_3, A_4 , the product $A_1 A_2 A_3 A_4$ can be fully parenthesized in _____ distinct way(s).

Answer (Please select your correct option)

Five



Four



Three



Two




correct answer
solved by hadi

MADE BY HADI

Worst case running time of Quick Sort algorithm for an array with n elements is?

Answer (Please select your correct option)

- n^2  correct answer solved by hadi
- $n^{\frac{n}{2}}$
- n
- n^8

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 15 of 52

Marks: 1 (Budgeted Time 1 Min)

If we encode and compress text using ASCII standard each character is represented by

Answer (Please select your correct option)

Fixed length codeword of 4 bits

Variable length codeword up to 4 bits

Variable length codeword up to 8 bits

Fixed length codeword of 8 bits.



correct answer
solved by hadi

MADE BY HADI

Question No : 16 of 52

Marks: 1 (Budgeted Time 1 Min)

The Huffman algorithm finds

Answer (Please select your correct option)

- sometime optimal some time non optimal solution
- space wise optimal and time wise non optimal solution
- a non-optimal solution
- an optimal solution



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

The Huffman algorithm time complexity

Answer (Please select your correct option)

Can be improved up to $O(n \log n)$



correct answer
solved by hadi

Can be improved up to $O(\sqrt{n} \log n)$

Is always $O(n^3)$

Is always $O(n^2)$

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI

EMAIL: hadirajputofficial@gmail.com

WHATSAPP & CALL: 03087122922

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI

EMAIL: hadirajputofficial@gmail.com

WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

Using ASCII standard the string "abacdaac"

Answer (Please select your correct option)

- If we use variable code for ASCII it will be 32 bits
- If we use fixed code for ASCII it will be 256 bits
- If we use variable code for ASCII it will be will 64 bits
- If we use fixed code for ASCII it will be 64 bits



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Using Huffman encoding technique the string "abc" will take

Answer (Please select your correct option)

5 bits

6 bits

24 bits

12 bits



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Question No : 20 of 52

Marks: 1 (Budgeted Time 1 Min)

Using Huffman encoding technique the string "a@a" will be encoded with _____ bits

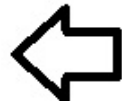
Answer (Please select your correct option)

5

6

8

Huffman encoding fail at this string



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

In fractional knapsack we sort the

Answer (Please select your correct option)

- Value per unit weight in increasing order
- Weight per unit value in increasing order
- Value per unit weight in decreasing order
- Weight per unit value in decreasing order



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP& CALL: 03087122922

MADE BY HADI

In generic graph traversal algorithm we

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

Answer (Please select your correct option)

put vertices in the bag data structure

put edges in the bag data structure



correct answer
solved by hadi

put edges in stack data structure

put vertices in the stack data structure

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

In time stamp traversal we can calculate

Answer (Please select your correct option)

- whether the graph has Cycles
- total number of cycles on the bases of forward edges
- total number of cycles on the bases if back edges
- total no of paths of certain length



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 24 of 52

Marks: 1 (Budgeted Time 1 Min)

when the graph has relatively few edges

Answer (Please select your correct option)

Prim's algorithm is better than Kruskal's

Kruskal's algorithm is better than Prim's

No one has priority over each other

the assumption few edges is not valid



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 25 of 52

Marks: 1 (Budgeted Time 1 Min)

Kruskal's algorithm

Answer (Please select your correct option)

Choose the best tree edge

Choose the vertex that gives the lightest weight

Follow the dynamic programming rules for choosing edges

Choose the best non-cycle edge



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 26 of 52

Marks: 1 (Budgeted Time 1 Min)

In Prim's algorithm we use

Answer (Please select your correct option)

Queue data structure

Priority Queue data structure

Stack data structure

Both stack and Queue data structures



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI

Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Adding any edge to a free tree

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

Answer (Please select your correct option)

- keeps it the free tree and increases the size of the tree
- creates a unique cycle
- it is not allowed to add the edge in free tree
- creates multiple cycles

correct answer
solved by hadi



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 28 of 52

Marks: 1 (Budgeted Time 1 Min)

An un-weighted graph can be considered as a graph in which every edge has

Answer (Please select your correct option)

- no weight assigned to it
- by default weight of one unit
- its own different keys of weights
- there are no such type of graphs in theory



correct answer
solved by hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 29 of 52

Marks: 1 (Budgeted Time 1 Min)

Kruskal's Algorithm is used for

Answer (Please select your correct option)

calculating shortest path problem

calculating Minimum spanning tree

shortest and Minimum Spanning tree both can be calculated by it

single source shortest path problems



right

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI

Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Kruskal's Algorithm has time complexity

Answer (Please select your correct option)

overall $\mathcal{O}(E \log E)$ and for sparse graph $\mathcal{O}(E \log V)$



correct answer
solved by hadi

overall $\mathcal{O}(EV)$ and for sparse graph $\mathcal{O}(V^2)$

overall $\mathcal{O}(V \log E)$

overall $\mathcal{O}(E \log V)$ for sparse graph $\mathcal{O}(V \log E)$

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 31 of 52

Marks: 1 (Budgeted Time 1 Min)

Bellman Ford algorithm applies relaxation to every

Answer (Please select your correct option)

- edge of the graph and repeats exactly $E-1$ times
- edge but use the back edges for the completion
- edge of the graph and repeats exactly $v-1$ times
- vertex of the graph and repeats exactly $E-1$ times



correct answer
solved by hadi

MADE BY HADI

Question No : 32 of 52

Marks: 1 (Budgeted Time 1 Min)

All algorithms having the time complexity $O(n^{10})$ and $O(n^{100})$ fall

Answer (Please select your correct option)

- Non-Deterministic Polynomial class
- Deterministic Polynomial class
- $O(n^{10})$ in P class and $O(n^{100})$ in NP class
- $O(n^{10})$ in NP class and $O(n^{100})$ in P class



A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP: 9899719999

correct answer
solved by hadi

MADE BY HADI

Question No : 33 of 52

Marks: 1 (Budgeted Time 1 Min)

In NP-problems "NP" represents

Answer (Please select your correct option)

Non-deterministic Polynomials



correct answer
solved by hadi

Null-polynomials

Negative Polynomials

Non-polynomials

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 34 of 52

Marks: 1 (Budgeted Time 1 Min)

Space used by Floyd-Warshall algorithm is

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL-03087122922

Answer (Please select your correct option)

$\Theta(n^4)$

$\Theta(n^3)$

$\Theta(n^2)$

$\Theta(2^n)$



correct answer
solved by hadi

MADE BY HADI

Question No : 35 of 52

Marks: 1 (Budgeted Time 1 Min)

If a problem is NP-complete

Answer (Please select your correct option)

there is no relation between NP and NP-complete

it can be solved in P time

it must be in P

it must also be in NP



correct answer
solved by hadi

MADE BY HADI

Question No : 36 of 52

Marks: 1 (Budgeted Time 1 Min)

If a problem "S" is NP- complete it must be

Answer (Please select your correct option)

NP and NP-hard



NP not necessarily NP-Hard

NP-hard means it is NP complete as well

in P and NP

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

In the 3-coloring problem, for two vertices to be in the same group, they must be not _____ to each other.

Answer (Please select your correct option)

Apart from

Far from

Near to

Adjacent to



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Question No : 38 of 52

Marks: 1 (Budgeted Time 1 Min)

Algorithm's essential elements are

Answer (Please select your correct option)

- | | | | |
|-----------------------|---|----------------------------------|-------------------------------------|
| <input type="radio"/> | Step wise solution | correct answer
solved by hadi | i think right
because in algo we |
| <input type="radio"/> | Stepwise solution and finite time | | solve problem step
wise |
| <input type="radio"/> | Step wise solution finite inputs | | |
| <input type="radio"/> | Stepwise approach in which time and memory does not matter. | | |

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 39 of 52

Marks: 1 (Budgeted Time 1 Min)

Search techniques of various algorithms look at ____

Answer (Please select your correct option)

Many possible solutions



correct answer
solved by hadi

Maximum 2 possible solutions

Minimum 2 possible solutions

Sorting solutions

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Which traversal technique is look like propagating wave-front outward

Answer (Please select your correct option)

Generic Traversal

Breadth First Traversal

Depth First Traversal

Time Stamp Traversal



correct answer
solved by hadi

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI

Email:hadirajputofficial@gmail.com/Whatsapp:03087122922(Team Hadi Lahore)

In strong components problem what complete refers to?

Answer (Please [click here](#) to Add Answer)

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI

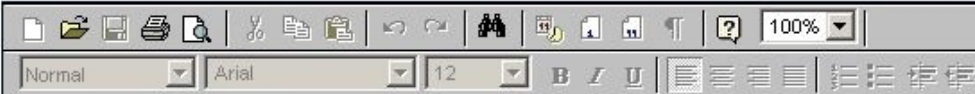
Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Question No : 42 of 52

Marks: 2 (Budgeted Time 4 Min)

What are quadratic series?

Answer ([Please click here to Add Answer](#))



MADE BY HADI

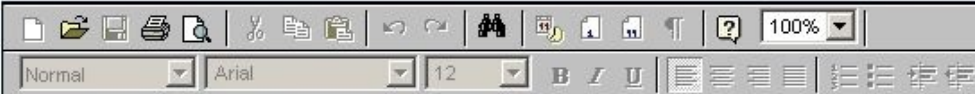
Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Question No : 43 of 52

Marks: 2 (Budgeted Time 4 Min)

What is overall time for Kruskal's algorithm if the graph is sparse?

Answer ([Please click here to Add Answer](#))

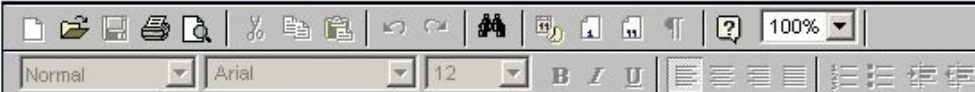


MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

When a problem is called a decision problem?

Answer (Please [click here](#) to Add Answer)



A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL-03087122922

A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL-03087122922

MADE BY HADI
Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Question No : 45 of 52

Marks: 3 (Budgeted Time 6 Min)

Formally describe Minimum Spanning Trees Problem.

Answer ([Please click here to Add Answer](#))



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

True or false: A sequence of values in a column of the dynamic programming table for an instance of the knapsack problem is always non-decreasing? Give a brief description.

Answer ([Please click here to Add Answer](#))



MADE BY HADI

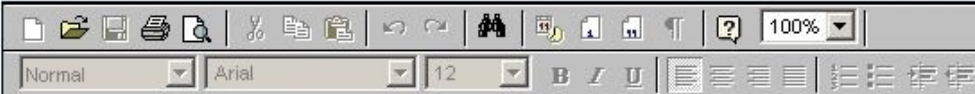
Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 47 of 52

Marks: 3 (Budgeted Time 6 Min)

Describe the relation between mutually reachable, equivalence relation, and component digraph.

Answer ([Please click here to Add Answer](#))



TEAM HADI(VU)

MADE BY HADI

Email: hadiraiputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 48 of 52

Marks: 3 (Budgeted Time 6 Min)

You are given the task of laying down new railway line between Peshawar and Karachi. There are n intermediate cities that can be used and you know the cost of laying track between any pair of these cities. Your goal is to spend the least total amount of track to construct the railway line. How would you determine the least amount of track and the cities to go through? Name the best algorithm which addresses the above problem.

Answer ([Please click here to Add Answer](#))

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

You are given the task of laying down new railway lines which will connect all n cities. Thus for any pair of cities, you will end up with track connecting them. Note that two routes may share the same track; track laid between Lahore and Islamabad can be used to travel in both directions. Your goal is to use the minimum amount of track. How would you achieve the goal now? (Note : consider the scenario carefully and name only the best suited algorithm)

- 1 Dijkstra's algorithm
- 2 Prims Algorithm
- 3 Folloyed Warshal Agorithm

Answer ([Please click here to Add Answer](#))



The image shows a screenshot of a rich text editor interface. The toolbar at the top includes icons for undo, redo, bold, italic, underline, text color, background color, bulleted list, numbered list, link, unlink, and a zoom dropdown set to 100%. Below the toolbar, the text area is mostly empty, with a large, semi-transparent watermark reading "TEAM HADI(VU)" diagonally across it. At the bottom right, there is a black box with the text "MADE BY HADI" in white, and below that, a yellow box with the text "Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)" in black.

MADE BY HADI

Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

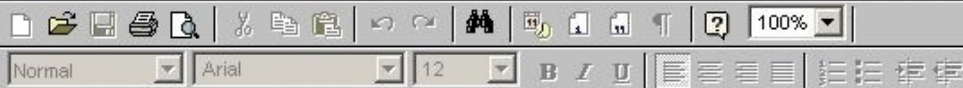
Following is not the minimum spanning tree convert it into MST. [You can show final result in exam software and need not to show all intermediate steps].



Answer (Please [click here](#) to Add Answer)

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP & CALL: 03087122922



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 49 of 52

Marks: 5 (Budgeted Time 10 Min)

There are given two cities connecting with each other by road which has different length. There are two pair of cities, for the one of them road connecting them. There are two roads may share the same track; track laid between Lahore and Islamabad can be used to travel in both directions. Your goal is to use the minimum amount of track. How would you achieve the goal now? (Note : consider the scenario carefully and name only the best suited algorithm)

- 1 Dijkstra's algorithm
- 2 Prims Algorithm
- 3 Folloyed Warshal Algorithm
- 4 Bellman Ford Algorithm.

Answer (Please [click here](#) to Add Answer)



The image shows a rich text editor interface. At the top, there is a toolbar with various icons for text formatting and editing. Below the toolbar, there is a text area with a large, diagonal watermark that reads "TEAM HADI(VU)". In the bottom right corner of the text area, there is a black box with the text "MADE BY HADI" in white, and below it, a yellow box with the text "Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)" in black.

Following is not the minimum spanning tree convert it into MST. [You can show final result in exam software and need not to show all intermediate steps].



Answer (Please [click here to Add Answer](#))

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI

EMAIL: hadirajputofficial@gmail.com

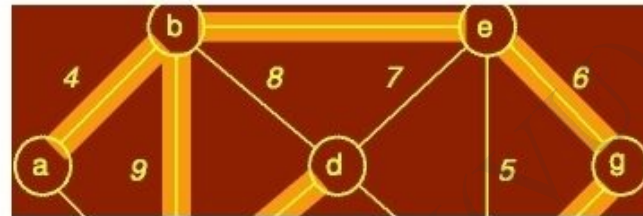
WHATSAPP & CALL: 03087122922

Normal Arial 12 B I U

TEAM HADI

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

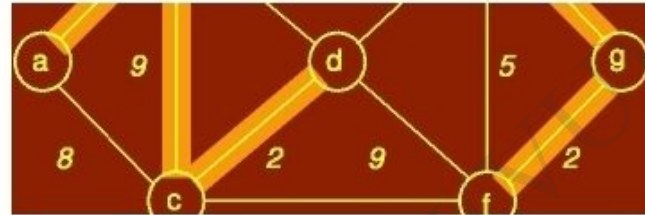


Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with icons for undo, redo, bold, italic, underline, list, link, unlink, and zoom (100%).

TEAM HADI

MADE BY HADI
Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)



Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with icons for undo, redo, bold, italic, underline, list, link, unlink, and a 100% zoom level.

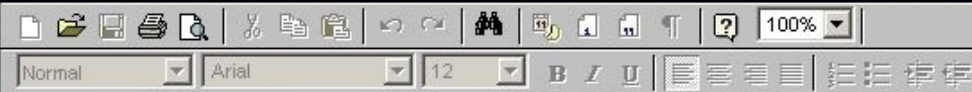
TEAM HADI

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)



Answer (Please [click here](#) to Add Answer)



TEAM HADJI

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 51 of 52

Marks: 5 (Budgeted Time 10 Min)

Consider the following recursive search function which returns the index of the array element containing key, if such an element exists. Find out what is the complexity of search and show your work.

```
int search( int* array, int left, int right, int key){
    int mid = (left + right)/2;
    if( left == right )
        return left;
```

Answer (Please [click here](#) to Add Answer)

A Good Education is a Foundation For a Better Future

CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP& CALL: 03087122922

MADE BY HADI

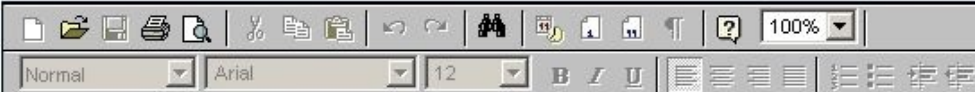
Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 51 of 52

Marks: 5 (Budgeted Time 10 Min)

```
return left;
else if( array[mid] <= key )
return search( array, mid+1, right, key );
else
return search( array, left, mid, key );
}
```

Answer ([Please click here to Add Answer](#))



MADE BY HADI

Email:hadirajputofficial@gmail.comWhatsapp:03087122922(Team Hadi Lahore)

Write pseudo code for the algorithm, if we implement the bag of knapsack by using a stack.

Answer (Please [click here](#) to Add Answer)



A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL:hadirajputofficial@gmail.com
WHATSAPP& CALL:03087122922

MADE BY HADI