Cs101 Long Questions

In programming, what is a loop?

In computer science a for loop is a programming language statement which allows code to be repeatedly executed. A for loop is classified as an iteration statement.

What are the other names of function? Any one.

Routine , procedure , sub prograam

How JavaScript Arrays are heterogeneous ?
Arrays are heterogeneous in java script because at the same time stimultanously they can hold elements of multiple data types

What is the database?

Data base is a collection of organized data in a proper way that computer can quickly search for any desired data item , its an easy way of allowing of manipulation of data,they are design in such a way that access to any desired data can be identified and reached quickly and easy , they are generally consist of collection of interrelated files

Differentiate between LAN and WAN with one example of each.

Lan is a local area network where as wan is a wide area network
Lan can be used in a specific areas with limited computers where as wan can be used on computers shared by large distances
For example lan can be used on pc s or an organization located in one building but wan can be used on large scales like banks all over or in any Large communication systems

What are Trojan Horses ?

Trojen horses are a kind of cyber crime , they are v harmful to computer because they are stand alone programme and the look like what they are not like any thing amusing or not harmless like games..

Elaborate Rester Graphics with examples.

A raster graphics image, digital image, or bitmap, is a data file or structure representing a generally rectangular grid of pixels, or points of color, on a computer monitor, paper, or other display device.

To illustrate the matter further - here's the letter "J":

J
Look closely at it... Take a magnifying glass to it if you like. You see a "J", the computer
sees something more like this, where '.' represents a zero and 'X' represents a one:

```
....X
....X
....X
....X
....X
....X
....X
X...X
X...X
.XXX.
```

Where you see a zero, the computer instructs its video hardware to paint the current
background color. A one calls for the current foreground color. Yes, it is actually a bit
more complicated, but it all basically boils down to one bit or the other making a
distinction
between the colors of adjacent pixels, which together form an image.

What are the important properties, methods and event handlers of image object?

The primary use of the image object is to download an image into the cache before it is
needed to display , image object can be used to create different kinds of animations or
to display one of several images based on the desired requirement , in java script
image object can be used to display the required pre loaded image
Properties of image object is : height , width ,hspace ,vspace , src , name border etc
Methods :none
Event handlers:on aboart , onload, onerror etc

Write the JavaScript code for the Function SumOddNumbers(maxNumber) that can add non-negative odd numbers up to maxNumber and return their sum.

```
Function sum odd numbers(maxnumber){var sum=0;
For(i=0; <maxNumbers;I++)
{
{
if(i / 2 == 1 || i == 1)
sum += i;
}

return sum;

}
```

Write a note on :

- Coding guidelines
- Guidelines for developing short programs.
- <u>Coding guidelines</u>
- • Always use semicolons to end statements
- • Indent blocks of code (2 to 5 spaces)
- • Identifiers
- • Use the camel back scheme
- • Variables: nouns
- • Functions: verbs
- • Comment Liberally
- • Make them descriptive but concise
-
  <u>Gudelines for developing short programs</u>.
- • Read and understand the problem
- • Do you have all the required data?
- • No: Get it
- • Else assume it. State it explicitly
- • Do the design

write a note on each of the following:

a. Vector or Object-Oriented Graphics:
b. Bit-Mapped or Raster Graphics:

A:In Vector or object oriented graphic everything drawn is treated as object. objects retain their identity after they are drawon. these objects can later be moved, stretched, duplicated, deleted,etc. they are resolution independent and have relatively small file size. the examples are: swf, svg, wmf, ps

brass_ibrahim: Vector graphics is the use of geometrical primitives such as points, lines, curves, and shapes or polygon(s), which are all based on mathematical equations, to represent images in computer graphics.

brass_ibrahim: The term "vector graphics" is mainly used today in the context of two-dimensional computer graphics Virtually all modern 3D rendering is done using extensions of 2D vector graphics techniques .Virtually all modern 3D rendering is done using extensions of 2D vector graphics techniques

B:Bit-Mapped or Raster Graphics:
Treats everything that is drawn as a bit-map
If an object is drawn on top of another, it is difficult to move just one of them while leaving the other untouched Changing the resolution often requires considerable touch-up work Relatively large file size Examples: gif, jpg, bmp

masood.tariq: Bit-Mapped or Raster Graphics:
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Q. What kind of information can be stored in a database?

In the old days, databases were limited to numbers, Booleans, and text
These days, anything goes
As long as it is digital data, it can be stored:
Numbers, Booleans, text
Sounds
Images
Video

Q. What does NIC stand for?

Network Interface Card

Q. What is Information Technology?

The group of technologies concerned with the capture, processing and transmission of information in the digital-electronic form.
Telecom Engineering, Computer Science, Computer Engineering, Software Engineering

Q. What is meant by universal access of internet services?

Universal Access
Same functionality to everyone

Q. Write JavaScript code to convert the number 236.2363611111556 into currency format and JavaScript statement to show output.

```
a = 236.236311111556 ;
b = a.toString( ) ;
decimalPos = b.indexOf( ".", 0 ) ;
c = b.substring( 0, decimalPos + 3 ) ;
document.write( c ) ;
```

Q. Briefly mention any three problems in old modes of presentation development

It was difficult and often costly to make changes, especially last minute changes
No sound, no animation, and no video
It was difficult keeping track of old ones and making sure of their proper storage

Q. What is the difference between Internet and Intranet ?

The **Internet** is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a *network of networks* that consists of millions of private, public, academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies. The Internet carries a vast array of information resources and services, most notably the inter-linked hypertext documents of the World Wide Web (WWW) and the infrastructure to support electronic mail.

An **intranet** is a private computer network that uses Internet Protocol technologies to

securely share any part of an organization's information or operational systems within that organization. The term is used in contrast to *internet*, a network between organizations, and instead refers to a network within an organization.

Q. Define the following terms:
A) Heuristic
A procedure that usually, but not always, works or that gives nearly the right answer
Rule of thumb learned through trial & error
Common sense lesson drawn from experience
Qualitative principle, guideline, general judgment
Natural language description of experience

B) System
System
A collection of elements which working together produces a result not achieved by the things alone

C) System architecture
System Architecture
The structure
(in terms of components, connections, constraints) of a product or a process

D) Analysis of Algorithm
Analysis in the context of algorithms is concerned with predicting the resources that re requires:
Computational time
Memory
Bandwidth
Logic functions
However, Time – generally measured in terms of the number of steps required to execute an algorithm - is the resource of most interest
By analyzing several candidate algorithms, the most efficient one(s) can be identified.

Q. Write a note on the following (4+6)
Two popular review methods
1. Give the problem statement, design, and code (that includes all assumptions) to a
peer, and ask him/her to see if things have been done properly
2. Walk a peer or a group of peers through the problem, the design, and the code
yourself

Two types of errors
Syntax Errors
• They are caused by the code that somehow violates the rules of the language
• Easy to detect and fix errors
• The browser stops code interpretation on detecting one of these

Examples:
–a = b + * c ;
–receiver = receiver + 2

Semantic Errors
• Occur when a statement executes and has an effect not intended by the programmer
• Hard to detect during normal testing
• Often times occur only in unusual & infrequent circumstances
• the '+' operator often results in unintended consequences. Remedy: Convert, before use.