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Past Papers by Waqar Siddhu
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If num1 is 0005 and the address of num1 is 0117 then after execution of instruction "mov ax, [num1]", what will be contents of AX register ?

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

VuAnswers.com



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Following are three common video services for INT 10 used in text mode. Identify the use of each video service which is listed below.

0. AH =00h
1. AH =01h
2. Ah =02h

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

VuAnswers.com

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What is the format of input buffer of DOS?

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

VuAnswers.com



Made by: Waqar Siddhu

In assembly language programming, which information is represented by descriptor's first 16-bits?

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

VuAnswers.com



Made by: Waqar Siddhu

In case of branching techniques used in Intel's architecture, which instruction is used to provide temporary diversion and how?

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

VuAnswers.com



Made by: Waqar Siddhu

Which processor's instruction set allows the following instructions and describe what task will be performed by each of these instructions?

CLR (A3)

EXG D0, D2

MOVE.B (A1), (A2)

MOVEA (2222).L, A4

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

VuAnswers.com



Made by: Waqar Siddhu

What are attributes of chargen video service for getting information about font of the text?

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

VuAnswers.com



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In BIOS video services, which specific services in text mode are invoked by the following values of AH register?

AH = 01

AH = 02

AH = 06

AH = 07

AH = 09

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

VuAnswers.com

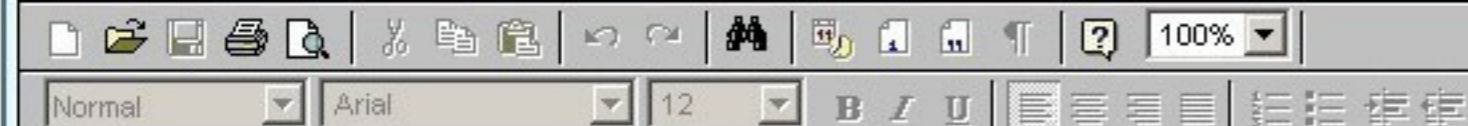


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For which purpose INT 1 is used and describe the functionality of this interrupt?

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



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What are different register settings for file closing using INT 21 service?

VuAnswers.com

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



Made by: Waqar Siddhu

In C language, what naming convention is used to call a function ?

VuAnswers.com

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



c prepends an underscore to every one

Made by: Waqar Siddhu

Write a single instruction that can be used as an alternative of the following two instructions?

```
DEC CX  
JNZ NextChar
```

VuAnswers.com

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



Made by: Waqar Siddhu

Suppose we want to execute multiple processes at same time. For this purpose we need to store and restore states of processes running in a multitasking operating system. Which process is used to store and restore states of processes in a multitasking operating system.

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



Made by: Waqar Siddhu

Consider the function "**int subtract (int x, int y)**" declared in C, Write the code to call this function from Assembly language.

VuAnswers.com

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



Made by: Waqar Siddhu

For what purpose Global Descriptor Table (GDT) is used?

VuAnswers.com

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



Made by: Waqar Siddhu

Check these instructions, whether they are valid or not, if not why? Make corrections and also mention how many bits have been moved in each instruction?

```
mov ax, [num1]
mov al, [num1]
mov ax, al
mov [num1], 5
```

VuAnswers.com

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



Made by: Waqar Siddhu

```
mov ax, [num1]
mov al, [num1]
mov ax, al
mov [num1], 5
mov byte[num1], 5
```

VuAnswers.com

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



Made by: Waqar Siddhu

Which processor's instruction set allows the following instructions and describe what task will be performed by each of these instructions?

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EXG D0, D2

MOVE.B (A1), (A2)

MOVEA (2222).L, A4

VuAnswers.com

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



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What is the effective address generated by each of the following instruction?

Initially BX=0x0100, label=0x0234, [label]=0x0010, and SI=0x00E1

- a. `mov ax, [bx+40]`
- b. `mov ax, [bx+label]`

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



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In INT 10 of video services while writing graphics pixel, what do the values of registers BH, AL, CX and DX correspond to?

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



Made by: Waqar Siddhu

What are different register settings for memory allocation using INT 21 Service?

VuAnswers.com

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



Made by: Waqar Siddhu

For which purpose INT 1 is used and describe the functionality of this interrupt?

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

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Made by: Waqar Siddhu

What is programmer's view of processor?

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

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We have 16 bit (word) information for device attribute. For what specific purpose the fifteenth bit is reserved?

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

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Write the complete command to assemble ABC.asm using NASM.

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

VuAnswers.com



Made by: Waqar Siddhu

What is the range of addressable memory in protected mode and which register is used to reference the descriptor for the Stack segment?

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

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How many routines are required to be defined by a device driver and what are their names?

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

VuAnswers.com



Made by: Waqar Siddhu

Suggest a modification in the design of 8088 Processor Architecture such that it can support 16MB RAM?

Hint: It will require increase or decrease in Address bus lines.

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

VuAnswers.com



Made by: Waqar Siddhu

What are two different modes of video services of BIOS? And differentiate between both of modes.

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

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Which processor's instruction set allows the following instructions and describe what task will be performed by each of these instructions?

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

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Write a subroutine to calculate the string length.

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

VuAnswers.com



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```
5. 12: inc ax
6. add bx, 2
7. dec cx
8. sub dx, 2
9. jmp 12
```

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

VuAnswers.com



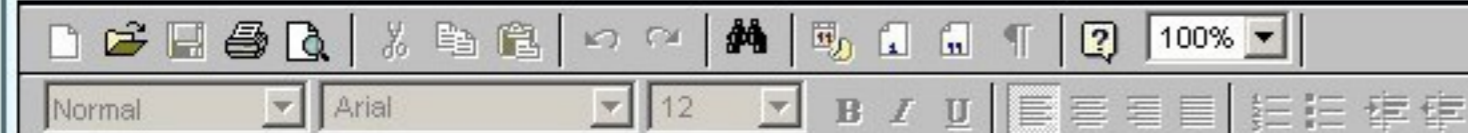
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Define following abbreviation:

- Dw

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



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What is the purpose of Triple fault ?

VuAnswers.com

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



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Write an assembly instruction that will allocate space for 32 PCBs?

VuAnswers.com

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

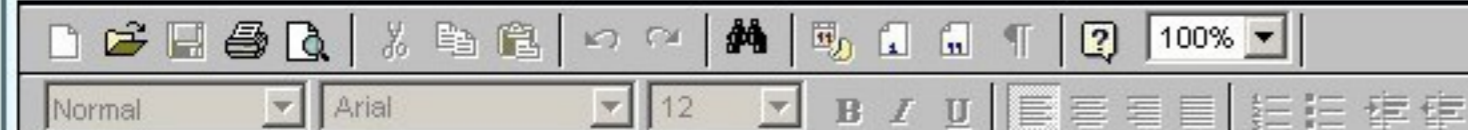


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In order to switch "Protected Mode", which bit of CR0 (Control Register 0) is needed to be turn on?

VuAnswers.com

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

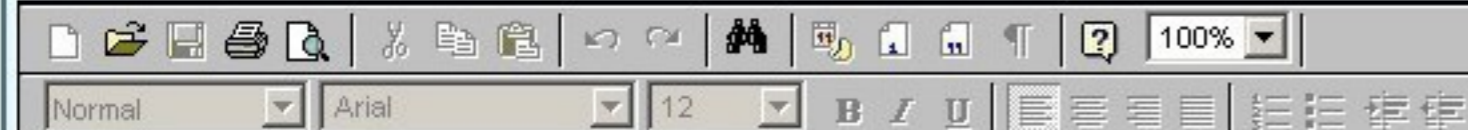


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Identify the technique in which user feels that programs are running at the same time and elaborate that how this technique works ?

VuAnswers.com

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

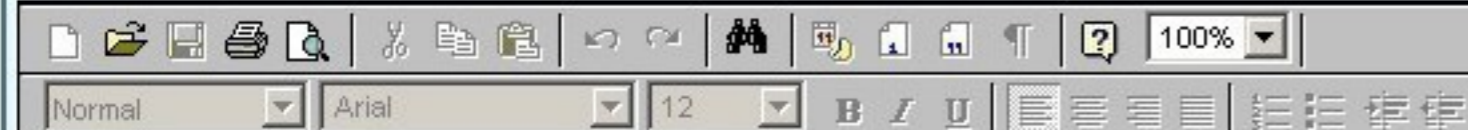


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How arithmetic operations instructions are written by Sun SPARC and by Motorola 68K Processor? State your answer with at least two examples from each processor.

VuAnswers.com

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



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What are the results after performing the following instructions, where $ax = 00110011$ and $bx = 00010001$

1. and ax,bx
2. or ax,bx
3. xor ax,bx

VuAnswers.com

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



Made by: Waqar Siddhu

What are the values required for following registers to write a character on serial port using INT 21?

AH =

AL =

DX =

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

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Which instruction makes trap flag zero? If there is no such instruction then how this task is performed?

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



Made by: Waqar Siddhu

Which processor's instruction set allows the following instructions and describe what task will be performed by each of these instructions?

CLR (A3)

EXG D0, D2

MOVE.B (A1), (A2)

MOVEA (2222).L, A4

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

VuAnswers.com



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How these instructions are legal or illegal. If illegal tell the reason and how can we make this legal, if legal then what these instructions do.

- mov ax, bx
- a. mov 10,ax
- b. mov bx, [num2]
- c. mov [num1],[num2]

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

VuAnswers.com

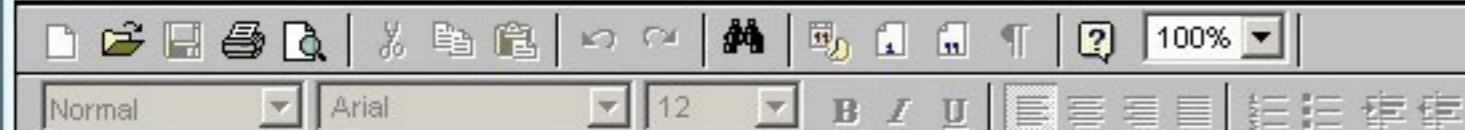


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- a. mov ax, bx
- b. mov 10,ax
- c. mov bx, [num2]
- d. mov [num1],[num2]
- e. add [num2],[num1]

VuAnswers.com

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

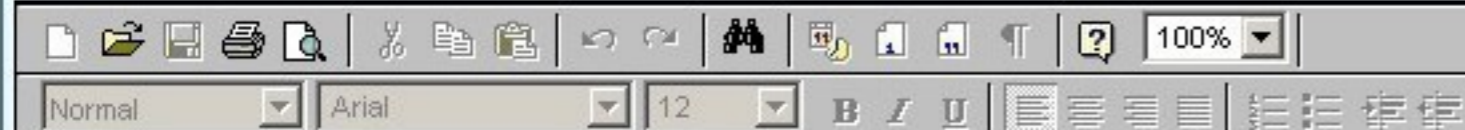


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Write an assembly program attributes for loading program using INT 21 Service.

VuAnswers.com

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



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How the data is transferred in serial communication?

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

VuAnswers.com



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How to identify maximum possible speed of multitasking?

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

VuAnswers.com



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In what order, the parameters are passed to routines in Pascal language?

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

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“Interrupts are asynchronous” What does it mean?

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

VuAnswers.com



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In context of Disk media, how many bytes are reserved for each of the following parts in “32 bytes directory format”?

- Extension
- Time
- Date

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

VuAnswers.com



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Write the functionality of following bits in IDTR

- P
- DPL
- S

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

VuAnswers.com



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Give the value of the zero flag, the carry flag, and the sign flag after each of the following instructions if AX is initialized with 0x1254 and BX is initialized with 0x0FFF.

- add ax, 0xEDAB
- add ax, bx
- add bx, 0xF001

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

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How many flags that are not used in mathematical operations and also mention their names?

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

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Made by: Waqar Siddhu

How many types of interrupt are used for writing debugger and also elaborate functionality of these interrupts with proper explanation?

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

VuAnswers.com



Made by: Waqar Siddhu

Calculate first and last physical address accessible by the following segment values:

- a. 0001
- b. E000

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

VuAnswers.com



Made by: Waqar Siddhu

Which interrupt is used to write Disk System and how can we write this system? Also mention (any four) attributes which are used in this service.

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

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Made by: Waqar Siddhu

Consider the function "**int multiply (int x, int y);**" declared in C, Write the code to call this function from Assembly language.

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

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Made by: Waqar Siddhu

Device drivers are operating system extensions which extend its services to new devices. Describe the structure of "Device Driver File" which is used for device management.

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

VuAnswers.com



Made by: Waqar Siddhu

With reference to branching technique used in assembly language programming, write any two control instructions.

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

VuAnswers.com



Made by: Waqar Siddhu

How local thread variables are created and accessed ?

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

VuAnswers.com



Made by: Waqar Siddhu

What are the following statements represent?

```
gdt: dd 0x00000000, 0x00000000
```

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

VuAnswers.com

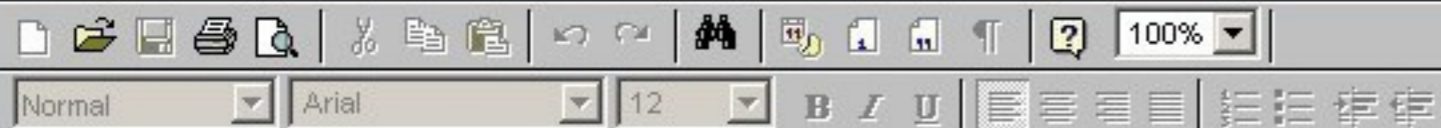


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What are the important "command codes" in request header of device driver?

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

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In order to access Video memory in high resolution (more than a megabyte MB), what standard we have to use?

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

VuAnswers.com



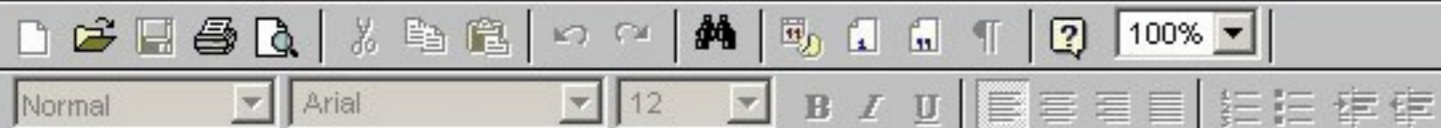
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Describe "Indexed Register Indirect + Offset" addressing mode with an example.

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

VuAnswers.com



Made by: Waqar Siddhu

With reference to the multitasking program "TSR caller". Describe what task will be performed by each of these instructions?

- `mov al, [chars+bx]`
- `mov [es:40], al`
- `inc bx`

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

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How many types of interrupt are used for writing debugger and also elaborate functionality of these interrupts with proper explanation?

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

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What are the contents at the starting position of the file designated as device driver and mention important attributes of this driver file?

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

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Made by: Waqar Siddhu

At which location interrupt gate descriptor table is stored and describe the structure of this table with an example?

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

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Give the new values of AX and DX for each of the following instructions, or write if the overflow occurs.

- \. DIV BX, if DX contains 0000h, AX contains 0007h, and BX contains 0002h
- a. DIV BX, if DX contains 0000h, AX contains FFFFh, and BX contains 0010h

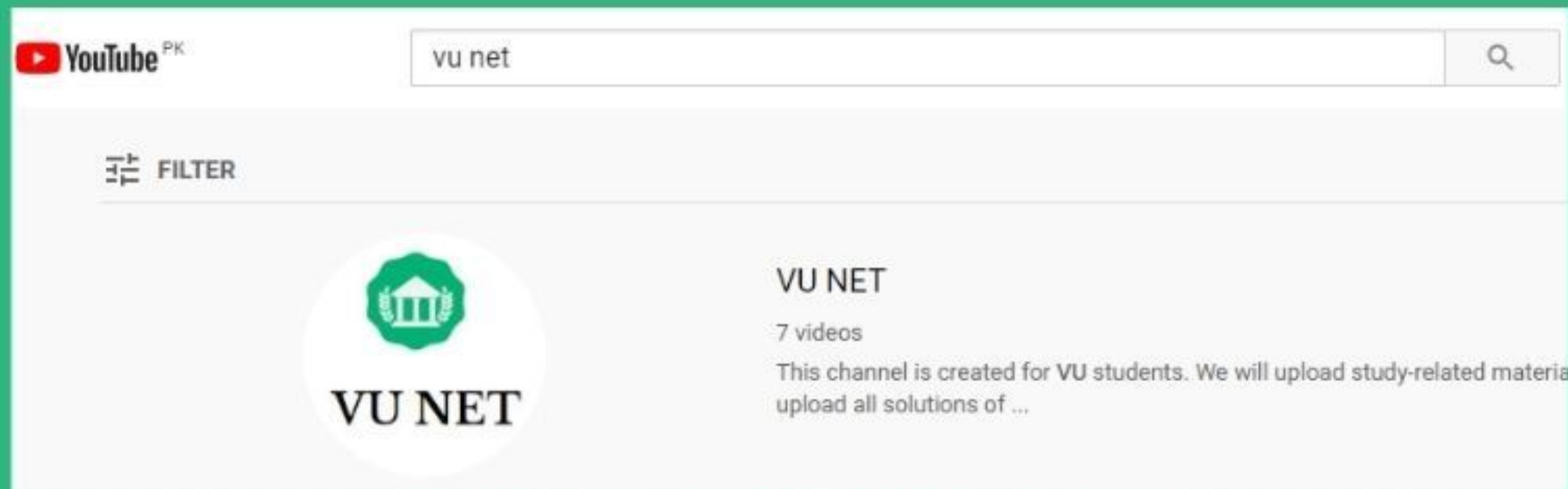
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