

Questions :

SE Computer -MPL Oral Questions

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- Explain the execution steps of 32 bit and 64 bit.
- Give the explanation of section .data, section .text, section .bss
- Why we define "2"? in macro disp_msg 2
- Why we define %1 and %2 in macro?
- Explain the type of directives?
- What is difference bet ax,eax, rax register?
- What is Full Form of NASM?
- Explain the string Operations.
- What is meaning of resb , resw?
- Why we use global_start?
- Why we use macro?
- Difference between macros and procedure
- Explain Divide Instruction.
- Write DIV instruction syntax.
- Explain ADD instruction.
- Explain 80386 Flag Register.
- Explain SUB Instruction. With syntax.
- What is DEC instruction?
- Explain CMP instruction.
- Explain OR instruction.
- Explain XOR instruction.
- Explain Addressing Modes.

- Write Syntax of Addressing Modes.
- Give Example of addressing Modes.
- What is meaning of “[]” bracket? (mov eax,[1234H])
- Which are conditional instruction?
- Which are Unconditional Instruction?
- Give example of Conditional JUMP instruction.
- Give example of Unconditional JUMP instruction.
- What is command line argument?
- Explain Rotate instruction.
- Give example of all Rotate instructions.
- Explain GDTR,LDTR,TR,MSW registers
- Explain features of 80386.
- Explain flag registers of 8086 and 80386.
- Explain memory size of 8086 and 80386.
- What is Protected Mode?
- What is paging mechanism?
- Explain control registers.
- Explain descriptors, selector.
- Explain data bus size and address bus size of 8086.
- Explain data bus size and address bus size of 80386.
- Which are assembly language directives? (DB, DW, DD, DQ and DT)
- How to convert protected mode to real mode? Which bit is set?
- Which control register is used for paging?
- Explain size of GDTR and IDTR and LDT register.
- Write “1 to 9” hexadecimal numbers into ASCII value.

- Write “A to F” hexadecimal numbers into ASCII value.
- Why we convert HEX to ASCII?
- Why we convert ASCII to HEX?
- Which are disadvantage of 8086? And advantage of 80386?
- Explain in detail Data Transfer Instructions
- Explain in detail Arithmetic Instructions
- Explain in detail Bit Manipulation Instructions
- Explain in detail Program Execution Transfer Instructions
- Explain in detail String Instructions
- Explain in detail Processor Control Instructions
- Explain size of page, page table, page directory.
- What is difference between multitasking and multithreading?
- Explain in detail Privilege Levels.
- What is TLB Buffer?

Steps for execution :-

If disp.asm is our program file then steps for execution are as below

```
:-$ nasm -f elf64 -o disp.o disp.asm
```

This command creates an object file disp.o with elf32 file format.

```
$ ld -o disp disp.o
```

This command creates an executable with a name hello from disp.o object file

```
$ ./disp
```

This command executes disp program