



RIPHAH
INTERNATIONAL UNIVERSITY

Computer Organization & Assembly Language

LAB 04

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Task 1

DATE: / /

Computer Organization & Assembly Lang

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- 1) write an assembly program to print your sapid in characteristics.
- 2) write an assembly language to print COAL with ASCII Ucode
- 3) Explain stack, code and data Segment in your own words.

Answer 01:

- data
- code

main proc

mov dl, '6'

mov ah, 2

int 21h

mov dl, '6'

mov ah, 2

int 21h

mov dl, '5'

mov ah, 2

int 21h

mov dl, '7'

mov ah, 2

int 21h

mov dl, '2'

mov ah, 2

int 21h

Task 2

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Answer Q2:

```

.data
.code
main proc
mov dl, 67
mov ah, 2
int 2ah
mov dl, 79
mov ah, 2
int 2ah
mov dl, 65
mov ah, 2
int 2ah
mov dl, 76
mov ah, 2
int 2ah
ret

```

Answer Q3:

Stack:

Stack is a set of data that is kept one above another. In Stack LIFO (Last Input first output) concept is used in an assembly language. We use stack to refer the stack.

Code:

Code is a set of instructions given to a programmer/compiler to do some specific task and in assembly

Task 3

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language, we use "code" and after that we start writing our instruction.

data segment:

The segment of data where the variables are stored is called data segment. It is a type of segment register.