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OCTOBER 3, 2022

COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE LAB

LAB 01 PRACTICE TASK

BCS203193
MUHAMMAD HARRIS – SECTION 4



Practice Task

Task 01

Print your university card's detail on console in the proper format.

Code:

```
.model small
```

```
.data
```

```
studentname db "Name: Muhammad Harris", "$"
```

```
studentreg db 0ah, 0dh, "Registration Number: BCS203193", "$"
```

```
studentprogram db 0ah, 0dh, "Program: Bachelors in Computer Science", "$"
```

```
.code
```

```
mov ax, @data
```

```
mov ds, ax
```

```
mov ah, 9
```

```
mov dx, offset studentname
```

```
int 21h
```

```
mov ah, 9
```

```
mov dx, offset studentreg
```

```
int 21h
```

```
mov ah, 9
```

```
mov dx, offset studentprogram
```

```
int 21h
```

```
mov ah, 4ch
```

```
int 21h
```

```
01 .model small
02 .data
03 studentname db "Name: Muhammad Harris", "$"
04 studentreg db 0ah,0dh,"Registration Number: BCS203193", "$"
05 studentprogram db 0ah,0dh,"Program: Bachelors in Computer Science", "$"
06 .code
07 mov ax, 0data
08 mov ds, ax
09
10 mov ah, 9
11 mov dx, offset studentname
12 int 21h
13
14 mov ah, 9
15 mov dx, offset studentreg
16 int 21h
17
18 mov ah, 9
19 mov dx, offset studentprogram
20 int 21h
21
22 mov ah, 4ch
23 int 21h
```

```
Name: Muhammad Harris
Registration Number: BCS203193
Program: Bachelors in Computer Science
```

Task 02

Print the Triangle on the screen with “*” character.

Code:

```
.model small
.data
lineone db "  *", "$"
linetwo db 0ah, 0dh, " ***", "$"
linethree db 0ah, 0dh, " *****", "$"
linefour db 0ah, 0dh, " *****", "$"
.code
mov ax, @data
mov ds, ax

mov ah, 9
mov dx, offset lineone
int 21h

mov ah, 9
mov dx, offset linetwo
int 21h

mov ah, 9
mov dx, offset linethree
int 21h

mov ah, 9
mov dx, offset linefour
int 21h

mov ah, 4ch
int 21h
```

```
01 .model small
02 .data
03 lineone db "*****"
04 linetwo db 0ah,0dh,"*****"
05 linethree db 0ah,0dh,"*****"
06 linefour db 0ah,0dh,"*****"
07 .code
08 mov ax,0data
09 mov ds,ax
10
11 mov ah,9
12 mov dx, offset lineone
13 int 21h
14
15 mov ah,9
16 mov dx, offset linetwo
17 int 21h
18
19 mov ah,9
20 mov dx, offset linethree
21 int 21h
22
23 mov ah,9
24 mov dx, offset linefour
25 int 21h
26
27 mov ah,4ch
28 int 21h
```

```
*****
*****
*****
*****
```