



New Era University

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Direction: Using your computer, construct an assembly language program that will show the output given below. After you successfully run your program, write the codes on the space provided.

OUTPUT 1:

Laurice Anne Laureta (your name)

BSCS (your program)

3rd yr (your year level)

OUTPUT 2:

COMPUTER

A

R

C

H

I

T

E

C

T

U

R

E

ORGANIZATION

CODE (lab5_1.asm)

```
TITLE LAB5_1.ASM
DOSSEG
.MODEL SMALL
.STACK 0100h
.DATA
    A db "Vem Aiensi Marasigan$" ;defines the strings
    B db "BSCS$"
    C db "3rd Year$"
.CODE
    MOV AX, @DATA
    MOV DS, AX

    MOV AH, 09h                ;request display string
    MOV DX, OFFSET A           ;load address of the string
    INT 21h                    ;call interrupt service

    MOV AH, 02h
    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV AH, 09h
    MOV DX, OFFSET B
    INT 21h

    MOV AH, 02h
    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV AH, 09h
    MOV DX, OFFSET C
    INT 21h

    MOV AX, 4C00h ;end
    INT 21h
END
```

OUTPUT (lab5_1.asm)

```
C:\>TASM lab5_1
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International
```

```
Assembling file:   lab5_1.ASM
Error messages:    None
Warning messages:  None
Passes:            1
Remaining memory:  491k
```

```
C:\>TLINK lab5_1
Turbo Link Version 4.0 Copyright (c) 1991 Borland International
```

```
C:\>lab5_1
Vem Aiensi Marasigan
BSCS
3rd Year
```

CODE (lab5_2.asm)

```
TITLE LAB5_2.ASM
DOSSEG
.MODEL SMALL
.STACK 0100h
.DATA
    A db "COMPUTER$"
    B db "ORGANIZATION$"
.CODE
    MOV AX, @DATA
    MOV DS, AX

    MOV AH, 09h
    MOV DX, OFFSET A
    INT 21h

    MOV AH, 02h
    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'A'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'R'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'C'
    INT 21h

    MOV DL, 0Ah
    INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
MOV DL, 'H'
INT 21h
```

```
MOV DL, 0Ah
INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
MOV DL, 'I'
INT 21h
```

```
MOV DL, 0Ah
INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
MOV DL, 'T'
INT 21h
```

```
MOV DL, 0Ah
INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
MOV DL, 'E'
INT 21h
```

```
MOV DL, 0Ah
INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
MOV DL, 'C'
INT 21h
```

```
MOV DL, 0Ah
INT 21h
```

```
MOV DL, 0Dh
INT 21h
```

```
    MOV DL, 'T'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'U'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'R'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV DL, 'E'
    INT 21h

    MOV DL, 0Ah
    INT 21h

    MOV DL, 0Dh
    INT 21h

    MOV AH, 09h
    MOV DX, OFFSET B
    INT 21h

    MOV AX, 4C00h ;end
    INT 21h

END
```

OUTPUT (lab5_2.asm)

```
C:\>TASM lab5_2
Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International
```

```
Assembling file:   lab5_2.ASM
Error messages:    None
Warning messages:  None
Passes:            1
Remaining memory:  490k
```

```
C:\>TLINK lab5_2
Turbo Link Version 4.0 Copyright (c) 1991 Borland International
```

```
C:\>lab5_2
COMPUTER
A
R
C
H
I
T
E
C
T
U
R
E
ORGANIZATION
```