

UNIVERSITY OF KARACHI



ASSEMBLY LANGUAGE PROGRAMMING

BSCS-403

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DEPARTMENT OF COMPUTER SCIENCE

UNIVERSITY OF KARACHI

PROGRAM TO PRINT TWO STRINGS ON TWO DIFFERENT LINES:

CODE:

```
File Edit Search View Options Help
C:\LAB3.ASM
DOSSEG
.MODEL SMALL ;MODEL DIRECTIVE
.STACK 100H ;STACK SEGMENT DIRECTIVE
.DATA ;INSIDE THIS VARIABLE ARE DECLEARED
MSG1 DB 'NAME : MUHAMMAD AMAS$'
MSG2 DB 'FATHER NAME : MUHAMMAD WASEEM$'
.CODE ;EXECUTABLE INSTRUCTIONS ARE DECLEARED HERE
MAIN PROC

MOV AX,@DATA
MOV DS,AX

MOV DX,OFFSET MSG1
MOV AH,9
INT 21H

MOV DX,10
MOV AH,2
INT 21H

MOV DX,13
MOV AH,2

MOV DX,OFFSET MSG1
MOV AH,9
INT 21H

MOV DX,10
MOV AH,2
INT 21H

MOV DX,13
MOV AH,2
INT 21H

MOV DX,OFFSET MSG2
MOV AH,9
INT 21H

MOV AH,4CH ;TO EXIT THE REGISTER
INT 21H

MAIN ENDP
END MAIN
F1=Help Line:1 Col:1
```

```
File Edit Search View Options Help
C:\LAB3.ASM
MOV DX,OFFSET MSG1
MOV AH,9
INT 21H

MOV DX,10
MOV AH,2
INT 21H

MOV DX,13
MOV AH,2
INT 21H

MOV DX,OFFSET MSG2
MOV AH,9
INT 21H

MOV AH,4CH ;TO EXIT THE REGISTER
INT 21H

MAIN ENDP
END MAIN
F1=Help Line:13 Col:1
```

OUTPUT:

```
C:\>EDIT LAB3.ASM
```

```
C:\>EDIT LAB3.ASM
```

```
C:\>MASM LAB3.ASM;
```

```
Microsoft (R) Macro Assembler Version 5.00
```

```
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.
```

```
51670 + 464874 Bytes symbol space free
```

```
0 Warning Errors
```

```
0 Severe Errors
```

```
C:\>LINK LAB3.OBJ;
```

```
Microsoft (R) Overlay Linker Version 3.60
```

```
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.
```

```
C:\>LAB3.EXE
```

```
NAME : MUHAMMAD AMAS
```

```
FATHER NAME : MUHAMMAD WASEEM
```

```
C:\>
```

HOME TASK, TWO DIGITS ADDER

CODE:

```
File Edit Search View Options Help
C:\NAME.ASM
DOSSEG
.MODEL SMALL ;MODEL DIRECTIVE
.STACK 100H ;STACK SEGMENT DIRECTIVE
.DATA ;INSIDE THIS VARIABLE ARE DECLEARED
MSG1 DB 'TWO DIGITS ADDER$'
MSG2 DB 'ENTER FIRST DIGIT :$'
MSG3 DB 'ENTER SECOND DIGIT :$'
MSG4 DB 'ANSWER :$'
.CODE ;EXECUTABLE INSTRUCTIONS ARE DECLEARED HERE
MAIN PROC
MOV AX,@DATA
MOV DS,AX
MOV DX, OFFSET MSG1
MOV AH,9
INT 21H
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2
INT 21H
F1=Help | Line:1 Col:1
```

```
File Edit Search View Options Help
C:\NAME.ASM
MOV DX, OFFSET MSG2
MOV AH,9
INT 21H
MOV AH,1 ;TAKING INPUT FIRST NUMBER
INT 21H
MOV BL,AL
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2
INT 21H

MOV DX, OFFSET MSG3
MOV AH,9
INT 21H
MOV AH,1 ;TAKING INPUT SECOND NUMBER
INT 21H
ADD BL,AL
SUB BL,48

MOV DX,10
F1=Help Line:44 Col:1
```

```
File Edit Search View Options Help
C:\NAME.ASM
ADD BL,AL
SUB BL,48

MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2
INT 21H

MOV DX, OFFSET MSG4
MOV AH,9
INT 21H
MOV DL,BL
MOV AH,2
INT 21H

MOV AH,4CH ;TO EXIT THE REGISTER
INT 21H
MAIN ENDP
END MAIN
F1=Help Line:62 Col:1
```

OUTPUT:

```

    0 Warning Errors
    0 Severe Errors

C:\>MASM NAME.ASM:
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

    51670 + 464874 Bytes symbol space free

    0 Warning Errors
    0 Severe Errors

C:\>LINK NAME.OBJ:

Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>NAME.EXE
TWO DIGITS ADDER
ENTER FIRST DIGIT :2
ENTER SECOND DIGIT :3
ANSWER :5
C:\>_
```