UNIVERSITY OF KARACHI

ASSEMBLY LANGUAGE PROGRAMMING

BSCS-403

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DEPARTMENT OF COMPUTER SCIENCE

UNIVERSITY OF KARACHI

PROGRAM USING CONDITIONAL JUMP:

```
  File   Edit   Search   View   Options   Help
                      C:\LT51.ASM
DOSSEG
.MODEL SMALL    ;MODEL DIRECTIVE
.STACK 100H     ;STACK DIRECTIVE
.DATA           ;VARIABLE DECLERATION
MSG1 DB'NUMBER IS EQUAL$'
MSG2 DB'NUMBER IS NOT EQUAL$'
.CODE           ;CODE SPACE
MAIN PROC

MOV AX,@DATA
MOV DS,AX

MOV DL,'3'
MOV AH,1
INT 21H

CMP AL,DL
JE L1
MOV DX,OFFSET MSG2
MOV AH,9
INT 21H

 F1=Help                              Line:1     Col:1
```

```
  File   Edit   Search   View   Options   Help
                      C:\LT51.ASM
MOV AH,1
INT 21H

CMP AL,DL
JE L1
MOV DX,OFFSET MSG2
MOV AH,9
INT 21H

MOV AH,4CH      ;TO EXIT THE REGISTER
INT 21H
L1:
MOV DX,OFFSET MSG1
MOV AH,9
INT 21H

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

MAIN ENDP
END MAIN

 F1=Help                              Line:35    Col:1
```

```
C:\>EDIT LT51.ASM

C:\>MASM LT51.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 LT51.OBJ;

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


C:\>LT51.EXE
3NUMBER IS EQUAL
C:\>LT51.EXE
2NUMBER IS NOT EQUAL
C:\>
```

PROGRAM TO DETECT THE INPUT NUMBER IS EVEN OR ODD:

```
 File  Edit  Search  View  Options  Help
                         C:\LT52.ASM
DOSSEG
.MODEL SMALL   ;MODEL DIRECTIVE
.STACK 100H    ;STACK DIRECTIVE
.DATA          ;VARIABLE DECLERATION
MSG1 DB 'EVEN$'
MSG2 DB 'ODD$'
.CODE          ;CODE SPACE
MAIN PROC

MOV AX,@DATA
MOV DS,AX
MOV AH,1
INT 21H
MOV BL,2
DIV BL
CMP AH,0
JE ISEVEN
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2       ;

MOV DX,OFFSET_MSG2
MOV AH,9
INT 21H
MOV AH,4CH ;TO EXIT REFISTER
INT 21H

ISEVEN:
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2
INT 21H
MOV DX,OFFSET MSG1
MOV AH,9
INT 21H

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

MAIN ENDP
END MAIN
 F1=Help                              Line:24      Col:14
```

```
C:\>EDIT LT52.ASM

C:\>MASM LT52.ASM;
Microsoft (R) Macro Assembler Version 5.00
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  51670 + 464874 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors

C:\>LINK LT52.OBJ;

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C:\>LT52.EXE
2
EVEN
C:\>LT52.EXE
3
ODD
C:\>_
```