

Chapter No: 6

Lectures 10
S. Sep
Theory
=y

Flow Control :-

- if else
- Loops → Repeat

Loops

Count Condition

↓ ↓

for loop while Loop

Point * * * * *

Mov DL, '*'

Mov AH, 2

Mov CX, 5

∴ CX use for
for loop.

repeat:

int 21H

Loop repeat

Point 1,2,3,4,5,6,7,8,9.

Mov AH, 2

Mov DL, 31H

∴ 31H → 1 stored in

Mov CX, 9

31H (by default)

Repeat:

int 21H

ADD DL, 1H

Loop repeat.

Put the sum of 1 to 9 into AX

Mov AX, 0

→ sum is 0

Mov BX, 1

→ starting number is 1

Mov CX, 9

ending 9

Repeat:

ADD AX, BX

→ 0 + 1 = 1

inc BX

Loop Repeat.

Put the sum of sequence 50 terms
in DX.

→ 4 ka gap hona chahiye

Mov DX, 0

Mov BX, 1

Mov CX, 50

Repeat:

ADD DX, BX

then ADD BX, 4

Loop Repeat.

Read a char and display it on the
next line 80 times.

Mov DX, /char

Mov AH, 9H

→ string display

Mov AH, 0AH

→ a single character display

Mov AH, 1

[Mov AH, 1 → 1 single character
int 21H ko read karta hai.
Mov AH, 2 → 2 single character
int 21H
Mov DL, 0AH ko display k liye
Next line k liye]
Mov DL, 0DH
int 21H

Mov CX, 80.
Mov DL, AL

Ax
AH AL

Repeat:

int 21H

Loop repeat.

Read a five character password
and overwrite it by carriage
return and display five X's

:: OAH carriage
return k liye
hai

CMP → compare

CMP Destination - Source

Flags are Set

e.g.: CMP AX, BX

→ JE / JZ ZF = 1

while - !

CMP AX, BX

JZ end-while

end-while

→ JNE / JNZ ZF = 0

→ JL SF < CF

Destination > Source

→ JG ZF = 0 SF = CF

Destination > Source

→ JGE SF = OF

→ JLE ZF = 1 SF = CF

while Loop

→ Print * 80 times.

Mov AX, 80

Mov BX, 1

repeat:

CMP AX, BX

JE not-repeat

Mov dl, 'x'

Mov ah, 2

Int 21h

Inc BX

JMP repeat,

not-repeat:

Mov ah, 04ch

Int 21h.

| Until while loop |

| Repeat - Until |

Mov al, '*'

Mov ah, 2

Mov AX, 80

Mov BX, 1

repeat:

Int 21h

Inc BX

CMP AX, BX

~~JNE~~ ~~not repeat~~

JNE repeat

not-repeat:

Mov dl, 0Ah

Mov ah, 1

repeat :

Int 21h

CMP dl, al

JNE repeat

not-repeat

Mov ah, 04ch

Int 21h.

Mov Bx, 0
Mov ah, 1
Int 21h

repeat:

CMP AL, 0Ah
JF norepeat
inc BX
Mov ah, 1
Int 21h
JMP repeat

norepeat:

repeat:
Mov ah, 1
Int 21h

repeat

CMP AL, **
JNE repeat

not repeat.

Mov BX, 2
Mov AX, 8
Mov DL, 0

Repeat:

CMP AX, BX

JL norepeat

Dec ~~DL~~ dl

Sub AX, BX

JMP repeat.

no repeat

Mov AX, 4

Mov BX, 2

Mov CX, 0

Repeat:

Dec BX

Add ~~DCX~~, AX

CMP BX, 0

JNE ~~JMP~~ ~~repeat~~

no repeat.

Repeat:

Mov ah, 1

Int 21

~~Add al + 20h~~

Mov al, 2

Int 21h

~~Mov Bl, 1~~

~~Press B1,~~

CMP Bl, 'Y'

JNE repeat

No repeat.