

01 APR 25  
19 APR 25

## Session - #3

### Lecture Outcomes

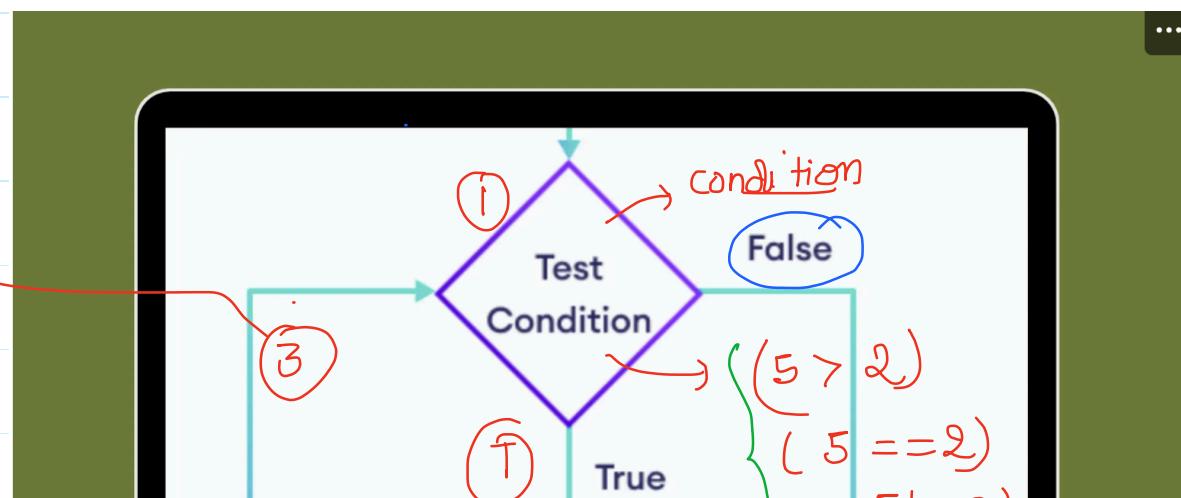
- For loops ✓
- While loops ✓
- Functions ✓

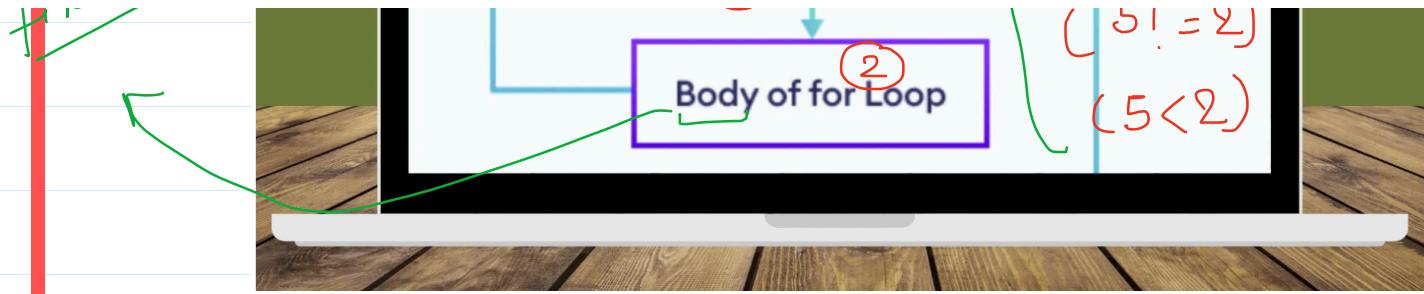
{  
    → sets, dictionary  
    → lists  
    → if else, elif

### Basic fundamental

### Basic necessities

Any code





T

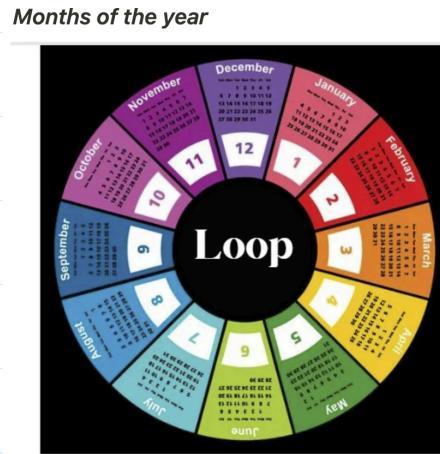
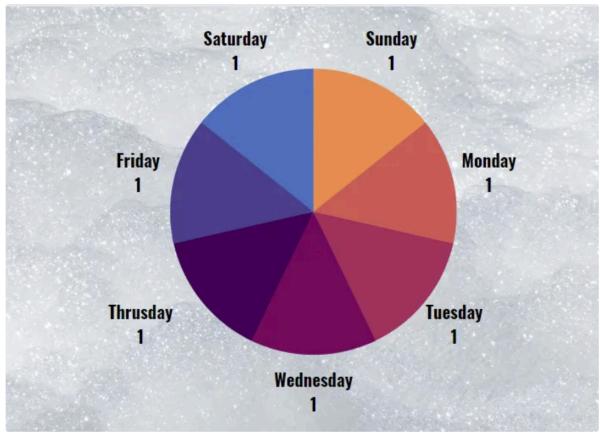
(condition)

{

Task

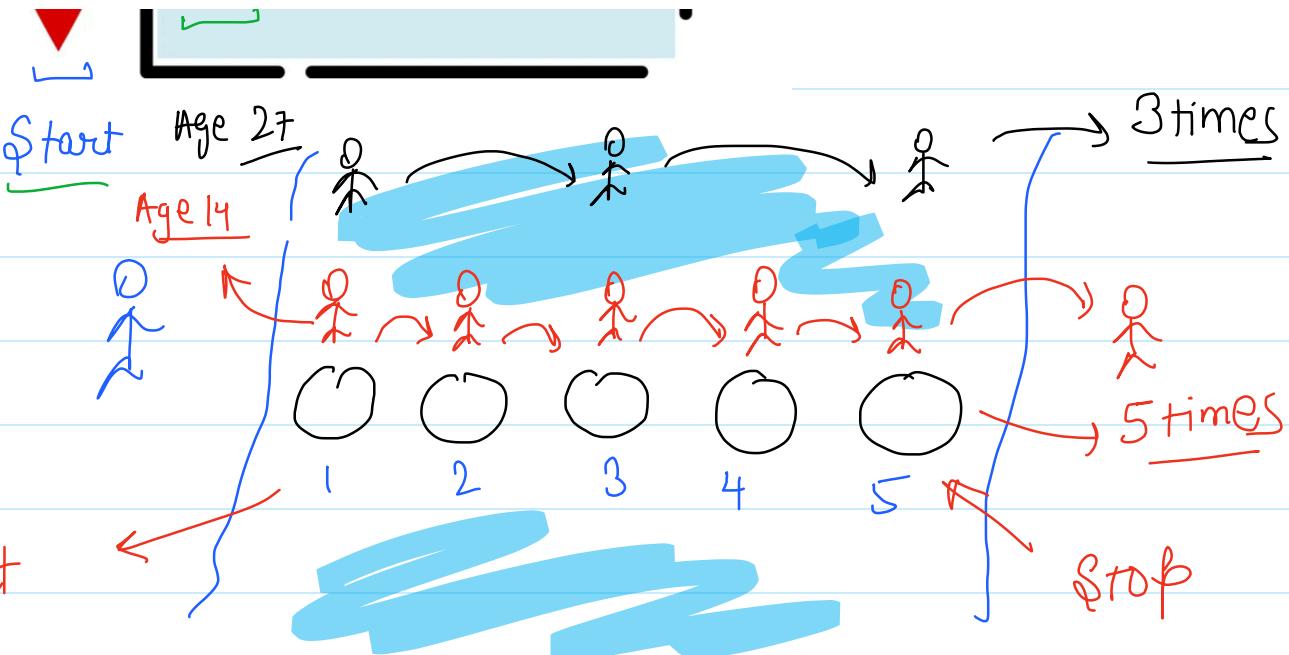
}





Repeating  
condition      the task until the  
satisfies .





Any loop → Start condition 0  
 Stop condition 10  
 & steps +1

Syntax :=

starting-point = 0

stopping-point = 10

starting-point < stopping-point

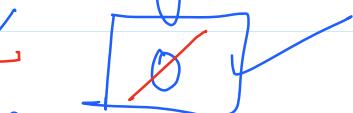
| Task here

how many jumps.

Day Run :-)

✓ starting\_point=0  
✓ stopping\_point=10  
✓ while starting\_point<stopping\_point:  
    print("We are at stone number", starting\_point)  
    starting\_point=starting\_point+1

Starting-point



10

Stopping-point



$$0 < 10 \rightarrow \text{True}$$

We are stone number 0

$$1 < 10 \rightarrow \text{True}$$

We are stone number 1

$$2 < 10$$

i=12  
j=67  
while 2\*i < j:  
    print(i)  
    i=i+1

i  
~~12~~  
j  
~~67~~

14     $(12 * 2 < 67)$  T

12     $(13 * 2 < 67)$  T

{  
12  
13  
14  
:  
:  
:  
33     $(14 * 2 < 67) - T$   
       $(33 * 2 < 67) - T$

$10 < 10 \rightarrow F$

for loop :-

L

range(start, stop, step)

for i in range(0, 10, 1):  
    print(i)

Start ↓ Stop ↓  
Increment ↗  
Exclusive ↗

O/P

i  
~~0~~ 1 2

0 < 10  
1 < 10  
2 < 10

:

9 < 10 → T

10 < 10 → False

range(start, stop, step):

default = 0

Step = 1

range (10)

Count

0

i  
 17

yoyo

```
count=0
for i in range(17,47,3):
    print("yoyo ",i)
    count=count+1
print(count)
```

2 20 yoyo

3 23

4 26

5 29

6 32

7 35

8 38

Count

10

9

41

10

44

47 → look

empty string

```
s = "";  
for i in range(1, 6):  
    s += str(i)  
print(s)
```

i=2

S = " "

O/P  
1

S = 1

1 2

1 2 3

1 2 3 4

1 2 3 4

→ integer

String

functions :-

Why

do we

need function

?  
S

"hand wash"  
"Do Dairty"  
"After & Before Each Meal."  
"hand wash"  
"Do Dairty"  
"After Each Meal."  
"hand wash"  
"Do Dairty"  
"After Each Meal."

3 lines of code  
1000 times

Code of 10,000 lines

0 to [3

10 to [3

1000 to 1003 [

1. hand wash

"Do Daily"

"After Each Meal"

g1 / 100      function name

call g1

return

"hand wash"

"Do twice in day"

"After Each Meal"

0 → call

returns

10 → call

15 → call

1 atm

L 000 — Cx