# Rwision Session -02

↳ Conditional Statements

↳ Loops.

# Conditional statement  (2 mins)

↳ Voting  •  age >= 18  →  Eligible for voting

age < 18  →  Not eligible for voting.

→ Types of conditional statements

① If

② Elif

③ Else

① If:
└→ a = 18

  if a == 18:
      print("Yes")

Syntax
if condition :

② else (otherwise)
  └→ else:
        print("No")

Syntax
else :

* Identation in python is very important.

a = 12

if a == 18:
    print("Yes")
else:
print("No")

error

```
File "/home/main.py", line 6
    print("No")
    ^
IndentationError: expected an indented block after 'else' statement on line 5
```

③ Elif
    ↳ Multiple cond<sup>n</sup>.

Syntax
    elif   condition :

↳ Note:-   for 1 particular logic
      we use  '1' if statement but can use multiple elif statements.

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**Q-1**            (4 mins)     12 mins
                            ↳ 09: 55 pm
↳ Take 2 variables.
↳ Find the sum.
↳ Check sum > 50 → " Sum is greater than 50"

          Otherwise → "Sum is less than equal to 50"

**Q-2**   Take a variable and check   ⇒ If a given no. is even → $a\%2 == 0$
      whether it is even or odd.
        (4 mins)

**Q-3**   Take a variable. (4 mins)
    ↳ Find it's remainder → 10
        ↳ if rem == 0 → print (0)
        ↳ if rem is multiple of 2 → multiple of 2
        ↳ otherwise not a multiple of 2

             (4 mins)

**Q-4**   Print the maximum of 3 nos. using cond<sup>n</sup> statements.

# Nested Conditional Statement

```
↳    if ( —— ):
           if ——————— ;
```

```
a = 50
    if ( ←—— ):
        print ( —— )
        if ( —— ):

    else:
        print ( —— )
        if
```

# Loops:-

Same task/work again and again

↳ print the following pattern.

↳ while loop
↳ for loop.

```
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* * * * *
```

```
print (" * * * * *")
print (" * * * * *")
print (" * * * * *")
print (" * * * * *")
```
→

a) <u>while loop</u>

<u>syntax</u>

    initialization

    while ( cond^n ):
        { logic;
        increment [ decrement

---

print the star patter 10 times.  ( ⋆xxxxx)

---

b  i = 1
    while ( i <=10);
      print("+xxxxx");
      i += 1

↳  i = 10
    while (i >= 1):
      print("xxxxxx")
      i -= 1

Q. Print the sum of first N natural nos.     N = 10     (4 mins)
using while loop.

Q. Print all even nos in the range of (a, b) where a and b are include.
(4 mins)

Q Print the n<sup>th</sup> table (4 mins)

Q Print all the factors of a given no.     n = 24
↳ 1, 2, 3, 4, 6, 8, 12, 24     (6 mins)

18 mins     →     90:50 pm