Day - 04

If Statement

If Statement is written by using 'if' keyword

The following conditions are sex most commonly using in If statements.

Equals : a == b
Not Equal : a != b
Less then or (or) equal to : a <= b

Greater then or equal to : a >= b

In If statement without indentation will raise an error. and we have to use in colon (:) in all If condition line.

E.x

```
a = 10
b = 15
If a > b:
    print ('a is greater than b')
else:
    print ('b is greater than a')
```

July 2017							August 2017							September 2017						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
30	31					1			1	2	3	4	5						1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30

Elif

' · if the previous condition were not true then try 'Elif' condition.

Ex

```
a = 33
b = 33
if b>a:
    print ('b · is greater than a')

elif a==b:
    print ('a' and b are equal')
        ↳ ouput 'a and b are equal'.
```

Else:

· It catches anything which isn't caught by preceding condition.

E.x

```
a = 200
b = 33
if b>a:
    print ('b is grater then a')

elif a==b:
    print ('a and b are equal')
else:
    print ('a is greater then b')
```

Short Hand

```
a = 30
b = 20
Print ('a') if a > 20 else print ('b')
```

multiple operation

```
a = 30
b = 25
Print ('a') if a > b else print ('=') if a == b Print (b)
```

And

The and keyword is a logical operator, and used to combine conditional statement.

```
a = 200    c = 500
b = 150
If a > b and c > a:
    Print ('Both condition are True')
```

(or)

Condition keyword

```
a = 200
b = 150
c = 500
if a > b or b > c:
    print ('At least one of the condition true')
```

Nested if:
you in if statements inside if statements

are called Nested if Statement.


```
x = 4,
    if x > 10:
        print ('Above ten')
        if x > 20:
            print ('and also above 20!')
    else:
        print ('but not above 20')
```
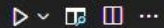
```python
#given data uthai college semester credit credit>65 means overload,credit<35 means underload,otherwise normal
credit_value=int(input('enter the credi_88value : '))
if(credit_value>65):
    print('this semester is overload')
elif(credit_value<35):
    print('this semester is underload')
else:
    print('this is normal semester')
```