unit-2 Conditional excecution and iteration

1) Simple if
* if condition :
* ____   Statement
* eg.

In [5]:
```python
name=input("Enter Your Name - ")
if name=="Dixit" :
    print("Hello Dixit")
print("How r U ???")
```

```
Enter Your Name - Dixit
Hello Dixit
How r U ???
```

2) if-else
* if condition :
* ____   Action-1
* else :
* ____Action-2
* eg

In [8]:
```python
name=input("Enter Your Name - ")
if name=="Dixit" :
    print("Hello Dixit")
    print("How r U ???")
else :
    print("Hey Who r U ???")
```

```
Enter Your Name - Patel
Hey Who r U ???
```

3) if-elif-else
* if condition :
* ____   Action-1
* elif condition :
* ____   Action-2
* elif condition :
* ____   Action-3
* else :
* ____   Default Action
* eg

In [17]:
```python
a=int(input("Enter a = "))
b=int(input("Enter b = "))
c=int(input("Enter c = "))
if a>b and a>c :
    print("Biggest Number : ",a)
elif b>c:
    print("Biggest Number : ",b)
else :
    print("Biggest Number : ",c)
```

```
Enter a = 22
Enter b = 72
Enter c = 38
Biggest Number :  72
```

4) Nested if
* if condition :
* _____ Action-1
* _____ if condition :
* _____ Action-2
* _____ else :
* _____ default

In [18]:
```python
x=15
if x>10 :
    print("Above 10")
    if x>20 :
        print("Also Above 20")
    else :
        print("Not Above 20")
```

```
Above 10
Not Above 20
```

loop
1) for
2) while

* 1) for Syantax
* for x in sequence :
* _____ body
* eg

In [22]:
```python
s="Dixit Patel"
print(len(s))
print()
for i in s :
    print(i)
```

```
11

D
i
x
i
t

P
a
t
e
l
```

In [30]:
```python
l=[1,2,3,4,5,6,7]
for i in l :
    print(i)
```

```
1
2
3
4
5
6
7
```

In [31]:
```python
for i in range(len(l)) :
    print(l[i])
```

```
1
2
3
4
5
6
7
```

```
2) While Loop Syntax
* While Conditiom
* ____ body
* eg
```

In [32]:
```python
i=0
while i<5:
    print(i)
    i+=1
```

```
0
1
2
3
4
```

In [35]:
```python
a=0
while a!=38 :
    a=int(input("Enter 38 Plz : "))
print("Confirmation")
```

```
Enter 38 Plz : 1
Enter 38 Plz : 2
Enter 38 Plz : 3
Enter 38 Plz : 4
Enter 38 Plz : 5
Enter 38 Plz : 6
Enter 38 Plz : 3
Enter 38 Plz : 38
Confirmation
```

Nested Loop

In [37]:
```python
for i in range(3):
    for j in range(3):
        print(i,j)
```

```
0 0
0 1
0 2
1 0
1 1
1 2
2 0
2 1
2 2
```