In [ ]:
```
# 1 Conditional statement
    # if
    # If -else
    # If elif else
    # Nested If else

# Iterative statement
    # for
    # while

# Transfer statement

    # pass
    # break
    # continue
```

In [ ]:
```
#Syntax

# if (condition):
#     statement
```

In [1]:
```
grade = 70

if grade >=30:
    print("Passsing grade")
```

```
Passsing grade
```

In [5]:
```
num = 10

if num  > 0:
    print(num)
```

```
10
```

In [ ]:
```
# If - else

#syntax
# if (condition):
#     statement
#     else:
#         statement
```

In [9]:
```
num = 10

if num  < 0:
    print(num)
else:
    print(f"Else condition values {num}")
```

```
Else condition values 10
```

In [17]:
```
grade = 50

if grade > 40:
    print("Pass")
else:
    print("Fail")
```

```
Pass
```

In [21]:
```
grade = int(input("Please input the marks values : "))

if grade > 40:
    print("Pass")
else:
    print("Fail")
```

```
Please input the marks values : 60
Pass
```

In [24]:
```
# If -elif - else

num = 1

if num > 0:
    print("positive number")
elif num == 0:
    print("zero")
else:
    print("negative number")
```

```
positive number
```

In [28]:
```
num1 =10
num2 = 20

if num1 > num2:
    print('num1 is greater than num2')
elif num2 > num1:
    print('num2 is greater than num1')
else:
    print('num1 is less than num2')
```

```
num2 is greater than num1
```

In [32]:
```
# if- multiple elif - else
grade = 92

if grade >= 90:
    print("A grade")
elif grade >=80:
    print("B Grade")
elif grade >=60:
    print("c grade")
else:
    print("D Grade")
```

```
A grade
```

In [ ]:
```
# Nested If else

if condtion_outer:

    if condtion_inner:
        statement
    else:
        statement
else:
    statement
```

In [35]:
```
num1 = -1

if num1 != 0:
    if num1 > 0:
        print("positive number ")
    else:
        print("negative number")
else:
    print("number is neither positive nor negative")
```

```
negative number
```

In [ ]:
```
#iterative statement

 # For

    #
     for <element> in <sequence>:  # list, tuple,string , dict
            stement
```

In [39]:
```
words = ["one","two","three"]

for word in words:
    print(word)
```

```
one
two
three
```

In [ ]:
```
# for(i=0;i<10;i++){

# }
```

In [40]:
```
range(10)
```

Out[40]:
```
range(0, 10)
```

In [41]:
```
for i in range(10): # range(start,stop,step) (0,10,1)
    print(i)
```

```
0
1
2
3
4
5
6
7
8
9
```

In [42]:
```
for i in range(0,10,1):
    print(i)
```

```
0
1
2
3
4
5
6
7
8
9
```

In [ ]:
```
while

while <condtion>:
    statement



# 1- initilization is neccessary
# 2- Add to incremental variable is again important
```

In [43]:
```
count = 0

while count < 10:
    print(count)
    count = count + 1
```

```
0
1
2
3
4
5
6
7
8
9
```

In [45]:
```
a  = 10

while a < 20:
    print(a)
    a = a+ 1
```

```
10
11
12
13
14
15
16
17
18
19
```

In [ ]:
```
## Exercise

Q1 :

*

*  *

*  *  *

*  *  *  *


Q2


1  2  3  4

1  2  3

1  2

1


Q3

*    *   *

*    *

*
```

In [1]:
```
## break

numbers = [10,20,30,40,50]

for num in numbers:
    if num > 30:
        break
    else:
        print(num)
```

```
10
20
30
```

In [2]:
```
i = 0
while i < 10:
    if i > 5:
        break
    else:
        print(i)

    i = i + 1
```

```
0
1
2
3
4
5
```

In [4]:
```
## Continue

for i in range(10):
    if i == 5:
        print("Hey, reach the condition value")
        print(i * i)
        continue
    else:
        print(i)
```

```
0
1
2
3
4
Hey, reach the condition value
25
6
7
8
9
```

In [5]:
```
## Pass

for i in [10,20,30]:
    pass
```

In [ ]:
```
num =10

if num == 10:
    pass
```

In [ ]:
```
def func():
    pass
```

In [ ]:
```
class Human():
    pass
```