```
In [ ]: try-except

        - the code will run in try

        - error handling exception
```

Conditional Statements

```
In [ ]: if - else

        if pak won the match they have more chance to go to SF
        else they have more chance to go home

        if I study will pass
        else will fail
```

```
In [ ]: name='python'
        # i want to make some condition
        # whenever the name ==python ====> success
        #            otherwise ========== > Fail
```

```
In [ ]: name='python'
        if <condition>:
            # sta-1
            # code

        else:
            # code
```

```
In [ ]: name='python'    # name
        if name=='python': # is the name really equal to python
            print('won')
```

```
In [ ]: a=10  # value 10 stored in a varaible'a'
        a==10 # the value of a really equal to 10
```

= assign

== condition

```
In [2]: name='python'    # assign
        name=='py'  # condition
```

```
Out[2]: False
```

```
In [ ]:  if <condition>:

         if  True/False:
             inside the block
```

```
In [3]:  # True case
         name='python'    # 'python' is saved in a variable 'name'
         if name=='python': # is the name really equal to python if True/False:
             print('won')
```

won

```
In [ ]:  # Error capture ====> my code should not stop
         # try: 100 lines   50 line you got error
         # first 49 exec======= 50===> exception
```

```
In [6]:  # False case
         name='python'
         if name=='py':     #if <False>: no permission
             a=10
             b=20
             print(a+b)
```

```
In [5]:  a=10
         b=20
         print(a+b)
```

30

```
In [8]:  name='python'
         if name=='py':    # False: np
             print('won')

         else:
             print('lost')
```

lost

```
In [10]: print('hello')
         print(10)
         num1=eval(input("enter a number1:"))
         num2=eval(input("enter a number2:"))
         if num1==num2:
             print("This is True case")
             print("We are doing addition operation")
             print("The addition of {} and {} is: {}".format(num1,num2,num1+num2))
             print("Happy ending!")

         else:
             print("This is False case")
             print("We are doing multiplication")
             print("The multiplication of {} and {} is: {}".format(num1,num2,num1*nun

         subtraction=num1-num2
         print('subtraction:',subtraction)
         print("great!")

         # hello
         # 10
         # num1=enter the number: 50
         # num2= enter the number=60
         # if 50==60  False np to enter inside the if block
         # else block
         #      this false
         #      we are doing mul
         #      the multi 50 60 is 3000
         #subtraction:-10
         #great
```

```
hello
10
enter a number1:50
enter a number2:50
This is True case
We are doing addition operation
The addition of 50 and 50 is: 100
Happy ending!
subtraction: 0
great!
```

```
In [15]: # wap ask the user enter a number
         # find the number is even or odd number
         # eve number: if you divide with 2 the reminder is zero
         # odd number
         # in python modulus opertor gives remainder
         13%2==0
```

```
Out[15]: False
```

```python
In [16]: num1=eval(input("Enter the number:")) # 55
         if(num1%2==0):   # 55%2==0 False : No p
             print("The {} is even number".format(num1))
         else:            # else block
             print("The {} is odd number".format(num1))
```

```
Enter the number:55
The 55 is odd number
```

```python
In [18]: try:
             num1=eval(input("Enter the number:"))
             if(num1%2==0):
                 print("The {} is even number".format(num1))
             else:
                 print("The {} is odd number".format(num1))

         except Exception as e:
             print(e)
```

```
Enter the number:python
name 'python' is not defined
```

```python
In [20]: num1=eval(input("Enter the number:"))
         if(num1%2!=0):
             print("The {} is odd number".format(num1))
         else:
             print("The {} is even number".format(num1))
```

```
Enter the number:200
The 200 is even number
```

```python
In [24]: #WAP get a random number between 1 to 50
         # and check it is an even number or odd number
         import random
         num1=random.randint(1,50)

         if(num1%2!=0):
             print("The {} is odd number".format(num1))
         else:
             print("The {} is even number".format(num1))
```

```
The 20 is even number
```

```python
In [ ]: try:
            num1=random.randint(1,50)

            if(num1%2!=0):
                print("The {} is odd number".format(num1))
            else:
                print("The {} is even number".format(num1))

        except Exception as e:
            print(e)
```

```
In [ ]:  # WAP get a random number between 1 to 200
         # print you won, if number between 10 to 99: num>=10 and num<99
         # otherwise print you lost
```

```
In [26]: import random
         try:
             num=random.randint(1,200)
             if (num>=10 and num<=99):
                 print("You won because {} is between 10 and 99.".format(num))
             else:
                 print("you lost because {} is not between 10 and 99.".format(num))

         except Exception as err:
             print(err)
```

You won because 56 is between 10 and 99.

```
In [27]: import random
         try:
             num=random.randint(1,200)
             if (10<num<99):
                 print("You won because {} is between 10 and 99.".format(num))
             else:
                 print("you lost because {} is not between 10 and 99.".format(num))

         except Exception as err:
             print(err)
```

You won because 85 is between 10 and 99.

```
In [29]: 10<170<99
```

Out[29]: False

```
In [32]: # WAP ask the user enter a number
         # if the number >=0  print it is a postive number
         # otherwise print it is a negtaive number

         num=eval(input("enter a number:"))
         if num>=0:
             print("it is a pos num")
         else:
             print("it is a neg num")
```

enter a number:99
it is a pos num

```
In [ ]:  # con-1: >0   ======== pos      if <cond>:
         # con-2: <0 ======== neg       elif <con>
         # con-3: =0 ======= zero       else:

         # two conditions:  if -else
         # > two condi:     if-elif-else
```

```
In [36]: num2=eval(input("enter a number: "))
         if num2>0:   # fail
             print("The given number {} is positive".format(num2))
         elif num2<0: # true  : stop
             print("The given number {} is negative".format(num2))
         else:        # else will not execute
             print("The given number {} is zero".format(num2))
```

enter a number: -10
The given number -10 is negative

```
In [ ]: #WAP ask the user enter percentage of marks
        # if per>90 pring A
        # if per between 70 to 90  print B
        # if per between 50 to 70  print C
        # otherwise print D
        # if -elif-elif-else
```

```
In [40]: per=eval(input("enter your percentage: "))
         if per>=90:
             print("A Grade")
         elif 70<per<90:
             print("B Grade")
         elif 50<per<70:
             print("C Grade")
         else:
             print("D Grade")
```

enter your percentage: 45
D Grade

```
In [43]: per=eval(input("enter your percentage: "))
         if per>=90:
             print("A Grade")
         elif per>=70:            # 82>70: T
             print("B Grade")     # stop
         elif per>=50:
             print("C Grade")
         else:
             print("D Grade")
```

enter your percentage: 49
D Grade
```

```
# wap ask the user  enter age
# if age > 60   print (SC)
# if age between 45 to 60 ( aged)
# if age between 30 to 45 (MA)
# if age between 20 to 30 (young)
# if age between 13 to 20 (teenage)
# otherwise child

# if-elif-elif-elif-elif-else
```

```
age=eval(input("enter your age: "))
if age>=100:
    print("Not possible")
elif age>=60:
    print("sc")
elif age>=45:
    print("Aged")
elif age>=30:
    print("Middle age")
elif age>=20:
    print("Young")
elif age>=13:
    print("Teenage")
else:
    print("child")
```

```
enter your age: 150
SC
```