

In [14]:

```
a = 4
```

In [15]:

```
b = 9
```

In [16]:

```
a,b=b,a
```

In [17]:

```
a
```

Out[17]:

```
9
```

In [18]:

```
b
```

Out[18]:

```
4
```

Conditional Statments

- if
- if else
- elif
- Nested if

In []:

```
# if Syntax
if condition:
    statment1
    statment2
```

In [10]:

```
# Single Line Comment
```

In []:

```
"""This is
multi
line comment"""
```

In [11]:

```
'''This is also a  
multi line  
comment'''
```

Out[11]:

```
'This is also a\nmulti line\ncomment'
```

In [12]:

```
# print data to user/Screen  
print("Hello World")
```

Hello World

In [13]:

```
# Input from User  
# input() # String is default input type  
name=input("Enter Your Name: ")
```

Enter Your Name: narayana

In [14]:

```
name
```

Out[14]:

```
'narayana'
```

In [15]:

```
# find Data type of variable/Value  
type(name)
```

Out[15]:

```
str
```

In [19]:

```
marks= int(input("Enter Marks= "))
```

Enter Marks= 84

In [17]:

```
type(marks)
```

Out[17]:

```
int
```

In [20]:

```
# Dynamic Float Value
temp = float(input("Enter float"))
```

Enter float4.6

In [21]:

```
temp
```

Out[21]:

4.6

In [23]:

```
abcd = int(float(input("Enter value=")))
```

Enter value=45621.215

In [24]:

```
abcd
```

Out[24]:

45621

In [26]:

```
# given number is even
# if Example

n = 8
if n%2==0:
    print('Even Number')
```

Even Number

In [28]:

```
n= int(input("Enter Number"))
if n%2==0: # {
    print("Even Num...")    #}
print("I am out If Block")
```

Enter Number7

In [1]:

```
# if else Example
# print given number is a Even or Odd Num
temp = input("Enter NUm")
temp1=int(temp)
if temp1%2==0:
    print("Even Number")
else:
    print("Odd Number")
    print("I have tab space at left side so that I am in else block")
```

Enter NUm61

Odd Number

I have tab space at left side so that I am in else block

In [3]:

```
# Print given number is Positive Or Negative NUm
i= int(input("Enter Number"))
if i>0:
    print("Positive Num")
else:
    print("Negative")
```

Enter Number-7

Negative

In [9]:

```
# Elif Example
percentage= int(input("Enter Per: "))
if percentage>=90:
    print("A")
elif percentage>=80:
    print("B")
elif percentage>=70:
    print("C")
elif percentage>=60:
    print("D")
else:
    print("Fail")
```

Enter Per: 59

Fail

In [3]:

```
# Nested If Example
...
if condition1:
    if condition2:
        if condition3:
            .....
...
expected=45
n= int(input("Enter Num"))
if n>0:
    print("Given Num is Position Number")
    if expected<n:
        print("U Enter value is High")
        print("U R Failed")
    if expected>n:
        print("U Enter value is Lowest")
        print("U R Failed")
    if expected==n:
        print("U R Win")
else:
    print("U Entered Value is Negative")
    print("U R Failed.")
```

Enter Num45

Given Num is Position Number

U R Win

Iterations

- for loop
- while loop

In [4]:

```
# for Loop Syntax
# C language For Loop Syntax
#for(initialization;condition;increment/Decrement)

# Python for Loop Syntax
# for(condition)
# for(initialization,condition)
# for(initialization;condition;increment/Decrement)
```

In [5]:

```
# print 10 numbers using for loop
for i in range(10):
    print(i)
```

0
1
2
3
4
5
6
7
8
9

In [6]:

```
# print 5 to 15 numbers using for loop
for temp in range(5,15+1):
    print(temp)
```

5
6
7
8
9
10
11
12
13
14
15

In [7]:

```
for j in range(20,10+20+5+1,2):
    print(j)
```

20
22
24
26
28
30
32
34

In [8]:

```
for kk in range(10,1,-1):  
    print(kk)
```

10
9
8
7
6
5
4
3
2

In [12]:

```
for i in range(1,11):  
    print("2*",i,'=',2*i)
```

2* 1 = 2
2* 2 = 4
2* 3 = 6
2* 4 = 8
2* 5 = 10
2* 6 = 12
2* 7 = 14
2* 8 = 16
2* 9 = 18
2* 10 = 20

TASK

- print N numbers tables

In []: