+ Code

```
print("Welcome to python ")
     Welcome to python
myNumber = 25
print(myNumber)
     25
myNumber1 = 4.6
print(myNumber1)
     4.6
myNumber2 = "hello"
print(myNumber2)
     hello
a,b,c = "Blue","Orange","Red"
print(a,"\n",b,"\n",c)
     Blue
      Orange
      Red
a=b=c="Orange"
print(a)
print(b)
print(c)
     Orange
     Orange
     Orange
fruits = ["Apple","Orange","Gova"]
a,b,c = fruits
print(a,b,c,sep = "\n")
     Apple
     Orange
     Gova
a = "Python is "
```

b = "awesome"

```
12/7/21, 8:33 PM
    c = a+b
    print(c)
    a = 25
    b = 14
    c = a+b
    print(c)
         39
    a = "Python"
    b = 25
    c = a+b
    print(c)
         TypeError
                                                       Traceback (most recent call last)
         <ipython-input-36-fb0d34f8fad1> in <module>()
                1 a = "Python"
                2 b = 25
          ----> 3 c =a+b
                4 print(c)
         TypeError: can only concatenate str (not "int") to str
           SEARCH STACK OVERFLOW
     a = int(1)
     b = int(4.2)
     c = int("3")
     print(a, "\n", b, "\n", c)
     x = float(5)
     y = float(5.5)
     z = float("25")
     print(x, "\n", y, "\n", z)
     s = str(5)
    d = str(5.5)
    f = str("25")
    print(s, "\n", d, "\n", f)
         1
          4
          3
         5.0
          5.5
          25.0
          5.5
```

```
#import keyword
import math
print(math.factorial(10))
#from keyword
from math import factorial
print(factorial(10))
     3628800
     3628800
#arguments
#this type is used to add at the end of the line
#firsty eg for star
print("Gowsi",end='**')
#for joining two words using end argument
print("Gowsika",end='Sree')
#for leaving a space
print("Gowsika",end='\n')
print("Sree")
#arugument
#separating a space or adding spacial char
print('B','I','T',sep=" ")
#for date formate
print('01','12','2021',sep="-")
#for mail type, joining two statements
print("Gowsika", "gmail.com", sep="@")
     Gowsi**GowsikaSreeGowsika
     Sree
     BIT
     01-12-2021
     Gowsika@gmail.com
name = input("what is your name : ")
print("hello",name)
college =input("which college are you studying :")
print(college, "ohh Great")
     what is your name : zara
     hello zara
```

```
which college are you studying :BIT
     BIT ohh Great
num1 = int(input("enter any value :"))
num2 = int(input("enter another value :"))
num3 = num1 * num2
print("product of two numbers is:", num3)
     enter any value :14
     enter another value :25
     product of two numbers is: 350
#importing "keyword" for keyword operator
import keyword
#printing all keywords at once using "kwlist()"
print("The list of keywords is :")
print(keyword.kwlist)
     The list of keywords is:
     ['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break', 'class', 'c
#boolen value
print(False == 0)
print(True == 1)
print(True +True+True)
print(True+False+False)
print(None == 0)
print(None == [])
     True
     True
     3
     1
     False
     False
#deleting a variable
#using del keyword
my_variable = 55
my variable2 = 66
del my_variable
del my_variable2
print(my_variable2)
#it will be deleted from memory
```

```
Traceback (most recent call last)
     NameError
     <ipython-input-44-d795cd6b43bd> in <module>()
           5 del my_variable
           6 del my_variable2
     ----> 7 print(my_variable2)
           9 #it will be deleted from memory
     NameError: name 'my_variable2' is not defined
      SEARCH STACK OVERFLOW
#multi line commands ,we can use triple quote
''' multiline commands
for example '''
     ' multiline commands\nfor example '
#python code to demonstrate variable assignment
num =int(input("Enter number :"))
print(num)
name =input("Enter name :")
print(name)
#printimng type og input value
print("type of number", type(num))
print("type of name", type(name))
     Enter number :14
     14
     Enter name :ZAR
     type of number <class 'int'>
     type of name <class 'str'>
#dot operator- split()
#it assigns the value in the order og input
x,y = input("Enter any two values:").split()
print("number given first :",x)
print("number given second :",y)
print()#this is to get a gap
#split based should be mentioned in split functions
\#ed .split(",") when seperated by comma, the special character used should be mentioned inside
```

Enter any two values:14 25

number given first : 14
number given second : 25

```
#there are 7 type of operator
#arithmetic,comparision(condition),logical(and or not),bitwise(binary representation),assignn
#Arithmetic
a = 14
b = 25
c = 0
c = a+b
print("add :",c)
c = a-b
print("sub :",c)
c = a*b
print("multiple :",c)
c = a/b
print("division :",c)
c = a\%b
print("remainder :",c)
c = a**b
print("power :",c)
c = b//a
print("rounding off",c)
     add : 39
     sub : -11
     multiple : 350
     division: 0.56
     remainder : 14
     power: 44998795805848373114515226624
     rounding off 1
#comparision operator
x = 25
y = 14
print('x>y :',x>y)
print("x<y :",x<y)</pre>
print("x==y",x==y)
print("x!=y :",x!=y)#not equal to
```

```
print("x>=y :",x>=y)
print("x<=y",x<=y)</pre>
     x>y : True
     x<y : False
     x==y False
     x!=y : True
     x>=y : True
     x<=y False
#logical operator
#and ,or ,not operators
#boolean value
#logical operator
x = True
y = False
print("x and y is", x and y)
print("x or y is",x or y)
print("x not y is ",not x)
     x and y is False
     x or y is True
     x not y is False
#bitwise opersator
#binary and,or,not,one's complement, binary right shift , binary left shift
a = 60
         #binary value = 0011 1100
b = 13
        #binary value = 0000 1101
# and operator
print("Line 1 - ",a &b) #12 = 0000 1100
#binary or operator
print("Line 2 - ",a | b)#61 = 0011 1101
#binary not operator
print("Line 3 - ",a^b) #49 = 0011 0001
#binary one's copmplement
print("Line 4 - ",~a)#-61 = 1100 0011
#binary left shift
print("Line 5 -",a<< 2)# 240 = 1111 0000
#binary right shift
print("Line 6 -",a>> 2)#15 = 0000 1111
```

Line 1 - 12

```
Line 2 - 61
     Line 3 - 49
     Line 4 - -61
     Line 5 - 240
     Line 6 - 15
#assinment operator
#assignment operator is = ,all the arithmentic operations will be combined with =
a = 14
b = 25
a+=b
print("Line 1 - ", a)
a-=b
print("Line 2 - ", a)
print("Line 3 - ", a)
a/=b
print("Line 4 - ", a)
     Line 1 - 39
     Line 2 - 14
     Line 3 - 350
     Line 4 - 14.0
#membership operator
#in not in
#out is boolean
# don't put zero infront of a single digit
a = 14
b = 25
list = [25,8,3,14,7];
print(a in list)
print(b not in list)
a = 2
print(a in list)
     True
     False
     False
#identity operator
#is is not
#comparision
#boolean values
a = 25
b = 25
```

```
print( a is b )
b = 14
print( a is b )
print(a is not b)
x2 = "Gowsi"
y2 = "Gowsi"
x3 = [25, 14, 17]
y3 = [25,14,17]
print(x2 is y2)
print(x3 is y3)#the output for list will always be false as the memory location is different
     True
     False
     True
     True
     False
#assessment
name,domain= input("Enter your mail ID :").split('@')
print("name =",name)
print("domain=",domain)
     Enter your mail ID :GOWSIKASREE.AD21@1074
     name = GOWSIKASREE.AD21
     domain= 1074
#conditional statement
#IF statement
#for checking true statement...it will be executed if it is true
# if the number is positive ,we print an appropriate messaage
num = 14
if num > 0:
  print(num, "is a positive number.")
print("This is always printed.")
num = -25
if num >0:
  print(num,"it is a negative number.")
print("it is not")
     14 is a positive number.
     This is always printed.
     it is not
#If and else condition
#only with if the condition should be printed
num = 25
```

```
print("Positive or Zero")
else:
  print("Neegative number")
num = int(input("Enter your number:"))
if num %2==0:
  print("It's a even number")
else:
  print("odd number")
# is elif and else conditions
#we can use n num of elif contion within a if and else condition
num = int(input("Enter your number:"))
if num > 0:
  print("It is a positive number")
elif num == 0:
  print("It is a zero")
else:
  print("It's Negative")
     Positive or Zero
     Enter your number:14
     It's a even number
     Enter your number:25
     It is a positive number
#question : 5% bonous if year of year is greater tha 5 yrs
year of exp = int(input("Enter your year of experience:"))
salary = int(input("Enter your salary:"))
if year of exp >= 5:
  print(salary*0.05,"is your bonous ")
else:
  print("Your are not eligible for receiving bonous")
     Enter your year of experience:6
     Enter your salary:25000
     1250.0 is your bonous
#QUESTION 2 :grade of student
name = input("Enter your name :")
math,science,social,English,Tamil = input("Enter your marks :").split(",")
maths = int(math)
sci = int(science)
```

```
total = math+science+social+English+Tamil
print(total)
if total > total*0.9:
  print("You have secured O grade")
elif total >= total*0.8:
  print("You have secuired A grade")
elif total >= total*0.7:
  print("You have secured B grade")
elif total >= total*0.6:
  print("You have secoured C grade")
else:
  print("You have secured F grade")
     Enter your name :jkh
     Enter your marks :20,5,485,745,54
     TypeError
                                                Traceback (most recent call last)
     <ipython-input-65-57eda4696fe6> in <module>()
           3 name = input("Enter your name :")
           4 math, science, social, English, Tamil = input("Enter your marks
     :").split(",")
     ----> 5 math, science, social, English, Tamil = int()
           6 total = math+science+social+English+Tamil
           7 print(total)
     TypeError: cannot unpack non-iterable int object
```

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