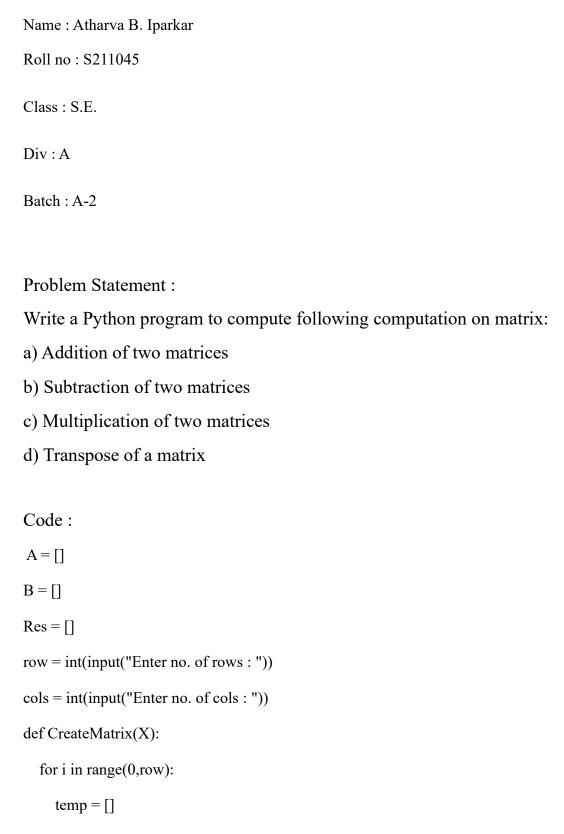
## Practical No. 03 (Group A)



```
for j in range(0, cols):
       num = int(input("Enter a no. : "))
       temp.append(num)
     X.append(temp)
  print(X)
def Addition():
  for i in range(0, row):
     temp = []
     for j in range(0, cols):
       num = 0
       temp.append(num)
     Res.append(temp)
  for i in range(0,row):
     for j in range(0, cols):
       Res[i][j] = A[i][j] + B[i][j]
  print(Res)
def Substraction():
  for i in range(0,row):
     for j in range(0, cols):
       Res[i][j] = A[i][j] - B[i][j]
  print(Res)
```

```
def Multiplication():
  for i in range(0,row):
     for j in range(0,cols):
       for k in range(0,cols):
          Res[i][j] = Res[i][j] + (A[i][k] * B[j][k])
  print(Res)
def Transpose():
  for i in range(0,row):
     for j in range(0, cols):
       Res[j][i] = A[i][j]
  print(Res)
CreateMatrix(A)
CreateMatrix(B)
print("Addition of matrix is : ")
Addition()
print("Substraction of matrix is : ")
Substraction()
print("Transpose of matrix is : ")
Transpose()
print("Multipication of matrix is : ")
Multiplication()
```

```
print("Length of matrix A is : ",(len(A)))
```

## Output:

```
/usr/bin/python3.8 /home/dcomp-proj/S211045_Atharva/Group A : Practical 3.py
Enter no. of rows : 2
Enter no. of cols : 2
Enter a no. : 2
Enter a no. : 3
[[1, 2], [3, 4]]
Enter a no. : 6
Addition of matrix is :
[[6, 8], [10, 12]]
Substraction of matrix is :
[[-4, -4], [-4, -4]]
Transpose of matrix is :
[[1, 3], [2, 4]]
Multipication of matrix is :
[[18, 26], [41, 57]]
Length of matrix A is : 2
Process finished with exit code 0
```