```
def add():
    print("Addition of two matrices is: ")
    for i in range(r1):
        for j in range(c1):
            ans[i][j]=m1[i][j]+m2[i][j]
    for r in ans:
        print(r)
def sub():
    print("Subtraction of two matrices is: ")
    for i in range(r1):
        for j in range(c1):
            ans[i][j]=m1[i][j]-m2[i][j]
    for r in ans:
        print(r)
def mul():
    print("Multiplication of two matrices is: ")
    for i in range(len(m1)):
        for j in range(len(m2[0])):
            for k in range(len(m2)):
                ans[i][j]+=m1[i][k]*m2[k][j]
    for r in ans:
        print(r)
def transpose():
    print("Transpose of matrix 1 is: ")
    ans=[[m1[j][i] for j in range(len(m1))] for i in range(len(m1[0]))]
    for r in ans:
        print(r)
    print("Transpose of matrix 2 is: ")
    ans=[[m2[j][i] for j in range(len(m2))] for i in range(len(m2[0]))]
    for r in ans:
        print(r)
op=1
r1=int(input("Enter number of rows for matrix 1: "))
c1=int(input("Enter number of columns for matrix 1: "))
```

```
r2=int(input("Enter number of rows for matrix 2: "))
c2=int(input("Enter number of columns for matrix 2: "))
print(".............ENTER DATA FOR MATRICES...........")
print("\nEnter data for matrix 1: ")
m1=[[int(input())for i in range(c1)] for j in range(r1)]
print("MATRIX 1: ")
for n in m1:
   print(n)
print("Enter data for matrix 2: ")
m2=[[int(input())for i in range(c2)] for j in range(r2)]
print("MATRIX 2: ")
for n in m2:
   print(n)
ans=[[0 for j in range(c1)] for i in range(r1)]
while(op==1):
   print("......OPERATIONS.......")
   print("\n1.Addition")
   print("\n2.Subtraction")
   print("\n3.Multiplication")
   print("\n4.Transpose")
   print("Enter your choice: ")
   ch=int(input())
   if(ch==1):
      add()
   elif(ch==2):
      sub()
   elif(ch==3):
      mul()
   elif(ch==4):
      transpose()
   else:
      print("WRONG CHOICE!!!")
   print("Do you want to perfomr again? Press 1 if yes else press 0: ")
   op=int(input())
```