```
Rows=int(input("Enter the number of rows:"))
Columns= int(input("Enter the number of columns:"))
#matrix1
print("Enter the numbers row-wise:")
matrix1= [[int(input()) for i in range (Columns)] for j in range (Rows)]
print("1st matrix")
for i in range(Rows):
    for j in range(Columns):
        print(format(matrix1[i][j],), end=" ")
    print()
#matrix2
print("Enter the numbers row-wise:")
matrix2= [[int(input()) for i in range (Columns)] for j in range (Rows)]
print("2nd matrix")
for i in range(Rows):
    for j in range(Columns):
        print(format(matrix2[i][j],), end=" ")
    print()
#addition
print("addition of two matrices")
c= [[0 for i in range (Columns)] for j in range (Rows)]
for i in range(Rows):
    for j in range(Columns):
        c[i][j]=(matrix2[i][j]+matrix1[i][j])
for i in range(Rows):
    for j in range(Columns):
        print(format(c[i][j],), end=" ")
    print()
#subtraction
print("subtraction of two matrices")
d= [[0 for i in range (Columns)] for j in range (Rows)]
for i in range(Rows):
    for j in range(Columns):
        d[i][j]=(matrix1[i][j]-matrix2[i][j])
for i in range(Rows):
    for j in range(Columns):
        print(format(d[i][j],), end=" ")
    print()
#multiplication
result = []
for i in range(Rows):
   row = []
   for j in range(Columns):
      row.append(0)
   result.append(row)
print("Multiplication of two matrices")
for i in range(Rows):
   for j in range(Columns):
      for k in range(Columns):
         result[i][j] += matrix1[i][k] * matrix2[k][j]
for row in result:
   print(row)
#transpose
print("Transpose of matrix 1")
for i in range(Rows):
```

```
    for j in range(Columns):
        print(matrix1[j][i], end=" ")
    print()
#2
print("Transpose of matrix 2")
for i in range(Rows):
    for j in range(Columns):
        print(matrix2[j][i], end=" ")
    print()
```