Program:-

```
rows = int(input('ENter number of rows: '))
cols = int(input('ENter number of column: '))
M1=[]
M2=[]
print('Enter values for matrix 1')
for i in range(rows):
     r=[]
     for j in range(cols):
          r.append(int(input(f"M1[{i+1}][{j+1}]:")))
     M1.append(r)
print("Matrix 1:")
for i in M1:
     print(i)
print('Enter values for matrix 2')
for i in range(rows):
     r=[]
     for j in range(cols):
         r.append(int(input(f"M1[{i+1}][{j+1}]:")))
     M2.append(r)
print("Matrix 2:")
for i in M2:
     print(i)
result = [[0 for i in range(cols)]for j in range(rows)]
for i in range(rows):
     for j in range(cols):
         result[i][j] = M1[i][j] + M2[i][j]
print('Addition of Matrix-1 and Matrix-2 is :')
for i in result:
     print(i)
```

Output:-