

EXPERIMENT-2

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Course: CSA1789 Artificial Intelligence

Q) Write a python program to Add Two Matrices

Program:

```
a=[]
n=int(input("Enter number of order"))
print("Enter elements:")
for i in range(n):
    row=[]
    for j in range(n):
        row.append(int(input()))
    a.append(row)
print(a)
print("Matrix form:")
for i in range(n):
    for j in range(n):
        print(a[i][j],end=" ")
    print()
b=[]
n1=int(input("Enter number of order"))
print("Enter elements:")
for i in range(n1):
    row1=[]
    for j in range(n1):
        row1.append(int(input()))
    b.append(row1)
print(b)
print("Matrix form:")
for i in range(n1):
    for j in range(n1):
        print(b[i][j],end=" ")
    print()
result=[[0,0,0],[0,0,0],[0,0,0]]
for i in range(n):
    for j in range(len(a[0])):
        result[i][j]=a[i][j]+b[i][j]
print("Sum of two matrices is:")
for r in result:
    print(r)
```

OUTPUT:

```
IDE Shell 3.10.5
File Edit Shell Debug Options Window Help
Enter elements:
1
2
3
1
2
3
1
2
3
[[1, 2, 3], [1, 2, 3], [1, 2, 3]]
Matrix form:
1 2 3
1 2 3
1 2 3
Enter number of order3
Enter elements:
2
3
2
2
3
2
3
2
3
2
[[2, 3, 2], [2, 3, 2], [2, 3, 2]]
Matrix form:
2 3 2
2 3 2
2 3 2
Sum of two matrices is:
[3, 5, 5]
[3, 5, 5]
[3, 5, 5]
```