

Parth Nikam PRN:- 20070123120 E&TC B-1

Matrix Multiplication

Code

```
In [4]: A=[[1,2,3],
          [6,5,4],
          [7,8,9]]

B=[[9,8,7],
   [4,5,6],
   [3,2,1]]

R= [[0,0,0],
     [0,0,0],
     [0,0,0]]

for i in range(len(A)):
    for j in range(len(B[0])):
        for k in range(len(B)):
            R[i][j]=r[i][j]+A[i][k] * B[k][j]
for ans in r:
    print(ans)

[26, 24, 22]
[86, 81, 76]
[122, 114, 106]
```

Algorithm

ALGORITHM

1. START
2. Make A and B and r as matrix list by nesting.
3. Multiply row 1 with 1,2,3 column of another matrix.
4. Multiply row 1 with 1,2,3 column of another matrix.
5. Multiply row 1 with 1,2,3 column of another matrix.
6. Add the results in step 3,4,5.
7. Store the values in r list by nesting.
8. Print r.
9. STOP

Flowchart



