

RANK-OF-A-MATRIX[↗]

Aim:[↗]

To write a python program to find the rank of a matrix

Equipment's required:[↗]

1. Hardware – PCs
2. Anaconda – Python 3.7 Installation / Moodle-Code Runner

Algorithm:[↗]

Step 1:[↗]

Import numpy package as np

Step 2:[↗]

Create a matrix using array() function.

Step 3:[↗]

Using the np.linalg.matrix_rank(), we can find the rank of the given matrix.

Step 4:[↗]

Get the output and end the program.

Program:[↗]

```
#Program to find the rank of a matrix.  
#Developed by: Harishkumar R  
#RegisterNumber: 23013540  
import numpy as np  
A= np.array ([[1,2,3],[3,6,9]])  
rank= np.linalg.matrix_rank(A)  
print(rank)
```



Output:🔗

```
1 #Program to find the rank of a matrix.
2 #Developed by: Harishkumar R
3 #RegisterNumber: 23013540
4 import numpy as np
5 A= np.array ([[1,2,3],[3,6,9]])
6 rank= np.linalg.matrix_rank(A)
7 print(rank)|
```

	Expected	Got	
✓	1	1	✓

Passed all tests! ✓

Result:🔗

Thus the rank for the given matrix is successfully solved by using a python program.