

```
1 C:\Users\Acer\AppData\Local\Microsoft\WindowsApps\python3.9.exe C:\
  Users\Acer\PycharmProjects\login\src.py
2 Please Enter number of rows : 3
3 Please Enter number of columns : 3
4 Please enter 3 elements for row 1 seperated by spaces : 1 2 3
5 Please enter 3 elements for row 2 seperated by spaces : 3 4 2
6 Please enter 3 elements for row 3 seperated by spaces : 5 7 3
7 Your inputted matrix :
8 1.0 2.0 3.0
9 3.0 4.0 2.0
10 5.0 7.0 3.0
11
12 Steps to convert above matrix to row echelon form:
13
14 Step1:
15  $R_2 = R_2 - (3.0) * R_1$ 
16  $R_3 = R_3 - (5.0) * R_1$ 
17
18 1.0 2.0 3.0
19 0.0 -2.0 -7.0
20 0.0 -3.0 -12.0
21
22 Step2:
23  $R_3 = R_3 - (1.5) * R_2$ 
24
25 1.0 2.0 3.0
26 0.0 -2.0 -7.0
27 0.0 0.0 -1.5
28
29 Row Echelon form matrix :
30 1.0 2.0 3.0
31 0.0 -2.0 -7.0
32 0.0 0.0 -1.5
33
34 Checking if rank(REF(matrix))==order
35 If rank(REF)!=order or if any row in REF is zero, solution is trivial,
  hence det(matrix)=0
36 Non Singular Matrix
37
38 Process finished with exit code 0
39
```