```
C:\Users\Acer\AppData\Local\Microsoft\WindowsApps\python3.9.exe C:\Users\Acer\PycharmProjects\login\src.py
Please Enter number of rows : 3
Please Enter number of columns : 4
Please enter 4 elements for row 1 seperated by spaces : 1 2 3 4
Please enter 4 elements for row 2 seperated by spaces : 2 3 4 5
Please enter 4 elements for row 3 seperated by spaces : 3 5 4 6
Your inputted matrix :
1.0 2.0 3.0 4.0
2.0 3.0 4.0 5.0
3.0 5.0 4.0 6.0

Steps to convert above matrix to row echelon form:

Step1:
R2=R2-(2.0)*R1
R3=R3-(3.0)*R1

1.0 2.0 3.0 4.0
0.0 -1.0 -2.0 -3.0
0.0 -1.0 -5.0 -6.0

Step2:
R3=R3-(1.0)*R2

1.0 2.0 3.0 4.0
0.0 -1.0 -2.0 -3.0
0.0 0.0 -3.0 -3.0

Row Echelon form matrix :
1.0 2.0 3.0 4.0
0.0 -1.0 -2.0 -3.0
0.0 0.0 -3.0 -3.0

Checking if rank(REF(matrix))==order
If rank(REF)!=order or if any row in REF is zero, solution is trivial, hence det(matrix)=0
Non Singular Matrix

Process finished with exit code 0

```