

Program no:2

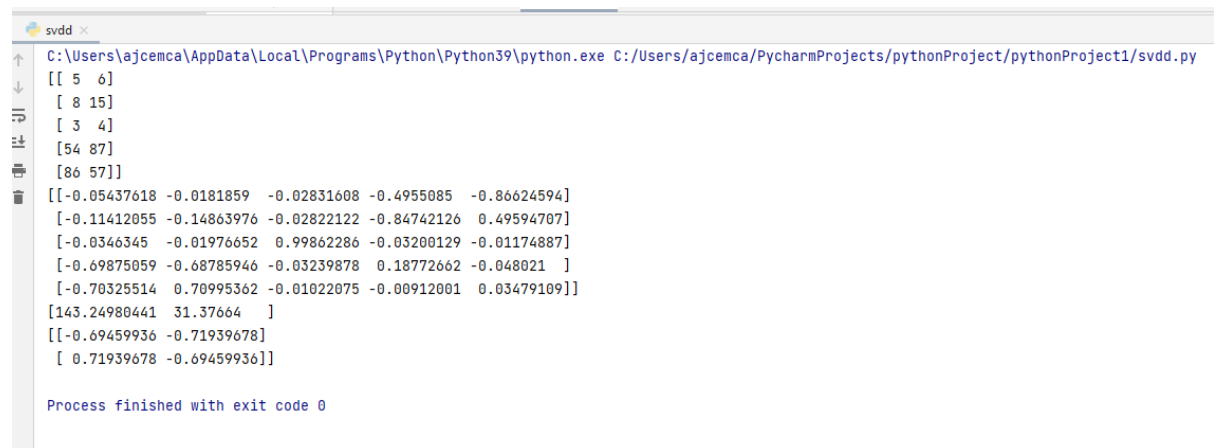
Aim :Perform SVD(Singular value decomposition) using python

## Program

```
from numpy import array
from scipy.linalg import svd

a = array([[5, 6], [8, 15], [3, 4],[54,87],[86,57]])
print(a)
x, y, z = svd(a)
print(x)
print(y)
print(z)
```

## OUTPUT



```
svdd x
C:\Users\ajcemca\AppData\Local\Programs\Python\Python39\python.exe C:/Users/ajcemca/PycharmProjects/pythonProject/pythonProject1/svdd.py
[[ 5  6]
 [ 8 15]
 [ 3  4]
 [54 87]
 [86 57]]
[[-0.05437618 -0.0181859 -0.02831608 -0.4955085 -0.86624594]
 [-0.11412055 -0.14863976 -0.02822122 -0.84742126  0.49594707]
 [-0.0346345 -0.01976652  0.99862286 -0.03200129 -0.01174887]
 [-0.69875059 -0.68785946 -0.03239878  0.18772662 -0.048021 ]
 [-0.70325514  0.70995362 -0.01022075 -0.00912001  0.03479109]]
[143.24980441  31.37664 ]
[[-0.69459936 -0.71939678]
 [ 0.71939678 -0.69459936]]

Process finished with exit code 0
```