```python
import numpy as np
n=np.random.randint(100,size=(2,2))
print(n)

print("determinant")
print(np.linalg.det(n))

print("inverse")
print(np.linalg.inv(n))

print("matrix Rank")
print(np.linalg.matrix_rank(n))

print("Transpose as 1-dimensional array:")
print(n.T.flatten())
```

output

git/OneDrive/Desktop/python programming/ramdom.py"

[[29  0]

 [53  6]]

determinant

174.0

inverse

[[ 3.44827586e-02 -2.09476042e-18]

 [-3.04597701e-01  1.66666667e-01]]

matrix Rank

2

Transpose as 1-dimensional array:

[29 53  0  6]