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In [1]: #Experiment:5
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In [3]: #Aim:Creation Of Arrays Using Numpy
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In [4]: #Name:Sakshi Rambhau Wankhade  
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#Sec:A  
#Subject:ET-1  
#Date:19-08-2025
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In [5]: import numpy as np
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Creating 1D Array Using Numpy

```
In [6]: a1=np.array([10,20,30,40,50])
```

```
In [7]: a1
```

```
Out[7]: array([10, 20, 30, 40, 50])
```

```
In [8]: print("Sum of all elements in 1D array:", np.sum(a1))
```

Sum of all elements in 1D array: 150

Creating 2D Array Using Numpy

```
In [9]: a2=np.array([[10,20,30,40,50],[90,50,60,40,10]])
```

```
In [10]: a2
```

```
Out[10]: array([[10, 20, 30, 40, 50],  
                [90, 50, 60, 40, 10]])
```

```
In [11]: print("Mean of 2D array:", np.mean(a2))
```

Mean of 2D array: 40.0

Creating MultiD Array Using Numpy

```
In [15]: a3=np.matrix('11,22;33,44;55,66')  
print(a3)
```

```
[[11 22]  
 [33 44]  
 [55 66]]
```

```
In [16]: print("Shape of 3D array:", a3.shape)
```

Shape of 3D array: (3, 2)

In []: