

```
In [1]: import numpy as np
# To create array using Tuple
num1=np.array((21,23,45,67,78))
print("Array is:")
print (num1)
```

Array is:
[21 23 45 67 78]

```
In [2]: import numpy as np
# To create array using Tuple
num2=np.array((21,23,45,67,78,67.8))
#adding float
print("Array is:")
print (num2)
#by default its getting float
```

Array is:
[21. 23. 45. 67. 78. 67.8]

```
In [3]: import numpy as np
# To create array using Tuple
num3=np.array((21,23,45,67,78,67.8,'panda'))
print("Array is:")
print (num3)
#by default its getting string
```

Array is:
['21' '23' '45' '67' '78' '67.8' 'panda']

```
In [4]: import numpy as np
# To create int array
num4=np.array([21,23,45,67,78,67.8,56.9],dtype='int32')
print("Array is:")
print (num4)
```

Array is:
[21 23 45 67 78 67 56]

```
In [5]: import numpy as np
# To create float array
num5=np.array([21,23,45,67,78,67],dtype='float32')
print("Array is:")
print (num5)
```

Array is:
[21. 23. 45. 67. 78. 67.]

```
In [8]: import numpy as np
num6=np.array([21,23,45,67,78,67])
print("Array is:")
print (num6)
print("No of elements:")
print(num6.size)
print("shape of array:")
print(num6.shape)
```

```
print("Diamention of array:")
print(num6.ndim)
```

Array is:
[21 23 45 67 78 67]
No of elements:
6
shape of array:
(6,)
Diamention of array:
1

```
In [11]: #creating a 2d array
import numpy as np
num2d=np.array([[21,23,45],[34,56,98]])
print("Array is:")
print (num2d)

# How to find Number of elements
print("No of elements:")
print(num2d.size)

# How to find shape of array
print("shape of array:")
print(num2d.shape)

# How to find Diamention of array
print("Diamention of array:")
print(num2d.ndim)
```

Array is:
[[21 23 45]
 [34 56 98]]
No of elements:
6
shape of array:
(2, 3)
Diamention of array:
2

```
In [12]: # Complex Array
import numpy as np
num7=np.array([1+2j,3-4j],dtype=np.complex128)
print("Array is:")
print(num7)
```

Array is:
[1.+2.j 3.-4.j]

```
In [18]: # String
import numpy as np
num8=np.array(['Hello', 'Students'],dtype=str)
print("Array is:")
print(num8)
```

Array is:
['Hello' 'Students']

```
In [23]: # Creating a NumPy array with datetime64
import numpy as np
date_array = np.array(['2025-01-21', '2025-01-22'], dtype=np.datetime64)

print("Array is:")
print(date_array)
```

Array is:
['2025-01-21' '2025-01-22']

```
In [27]: # Creating an array of 20
import numpy as np
number1=np.arange(20)
print("Array is:")
print(number1)
```

Array is:
[0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19]

```
In [25]: # Creating an array from 20-30
import numpy as np
number2=np.arange(20,30)
print("Array is:")
print(number2)
```

Array is:
[20 21 22 23 24 25 26 27 28 29]

```
In [26]: # Creating an array from 20-60 with gap 5
import numpy as np
number3=np.arange(20,60,5)
print("Array is:")
print(number3)
```

Array is:
[20 25 30 35 40 45 50 55]

In []: