Most Commonly used functions: -

- 1. np.ones(): It is used to create an array of 1s.
- 2. np.zeros(): It is used to create an array of 0s.
- 3. np.random.randint(): It is used to create a random array of integers within a particular range.
- 4. np.random.random(): It is used to create an array of random numbers.
- 5. np.arange(): It is used to create an array with increments of fixed step size.
- 6. np.linspace(): It is used to create an array of fixed length.
- 7. np.full(): It is used to create a constant array of any number 'n'.
- 8. np.tile(): It is used to create a new array by repeating an existing array for a particular number of times.
- 9. np.eye(): It is used to create an identity matrix of any dimension

Array 'arange' Function

Description - Create an array of first 10 multiples of 5 using the 'arange' function.

```
import numpy as np
array_multipleof5 = np.arange(5,55,5)
print(array_multipleof5)

[ 5 10 15 20 25 30 35 40 45 50]
```

Create border array

Description Given a single integer n, create an (n x n) 2D array with 1 on the border and 0 on the inside.

Note: Make sure the array is of type int.

```
import numpy as np
matrix = np.ones((n,n),dtype=int)
```

```
matrix[1:-1,1:-1]=0
print(matrix)

2
[[1 1]
[1 1]]
```