In [10]:
```
import numpy as np

print(np.random.rand())
print(np.random.randn())
```

```
0.4806292114324241
-0.44917031704756727
```

In [20]:
```
import numpy as np
arr = np.array([1,2,3,4,5,6])
indices = np.where(arr > 3)
print(indices)  # Output: (array([3]),)  --> Index of elements > 3
```

```
(array([3, 4, 5]),)
```

In [21]:
```
import numpy as np
arr = np.array([[1,2,3], [4,5,6],[0,8,9]])
transposed_arr = np.transpose(arr)
print(transposed_arr)
```

```
[[1 4 0]
 [2 5 8]
 [3 6 9]]
```

In [22]:
```
import numpy as np
arr = np.array([1,2,3,4,5,6])
print(np.mean(arr))
```

```
3.5
```

In [23]:
```
import numpy as np
arr = np.array([1,3,2,5,6,8,4])
print(np.median(arr))
```

```
4.0
```

In [26]:
```
import numpy as np
arr = np.array([10,20,15,3,50,85,32,45])
print(np.argmax(arr))  # Output: 3 (Index of 40)
print(np.argmin(arr))  # Output: 2 (Index of 5)
```

```
5
3
```

In [27]:
```
import numpy as np
arr = np.array([10,20,3,12,32])
index = np.searchsorted(arr, 25)
print(index)
```

```
4
```

In [28]:
```
import numpy as np
arr = np.array([10, 20, 30, 40, 50, 60])
condition = arr > 35
result = np.extract(condition, arr)
print(result)
```

```
[40 50 60]
```

In [34]:
```
import numpy as np
arr = np.array([1,2,3,4,5,9,8,6])
split_arr = np.split(arr, 4)
print(split_arr)
```

```
[array([1, 2]), array([3, 4]), array([5, 9]), array([8, 6])]
```

In [35]:
```
import numpy as np
arr = np.array([5,3,2,8,1,7])
sorted_arr = np.sort(arr)
print(sorted_arr)
```

```
[1 2 3 5 7 8]
```

In [36]:
```
import numpy as np
arr1 = np.array([1, 2])
arr2 = np.array([3, 4])
result = np.concatenate((arr1, arr2))
print(result)
```

```
[1 2 3 4]
```

In [37]:
```
import numpy as np
arr1 = np.array([1, 2])
arr2 = np.array([3, 4])
result = np.vstack((arr1, arr2))
print(result)
```

```
[[1 2]
 [3 4]]
```

In [38]:
```
import numpy as np
arr1 = np.array([1, 2])
arr2 = np.array([3, 4])
result = np.hstack((arr1, arr2))
print(result)
```

```
[1 2 3 4]
```

In [39]:
```
import numpy as np
arr = np.array([1, 2, 3, 4, 5])
condition = arr > 2
filtered_arr = arr[condition]
print(filtered_arr)
```

```
[3 4 5]
```

In [ ]:
```

```