

```
import numpy as np
import pandas as pd
```

[2] ✓ 3.2s

```
array1 = np.arange(1, 11).reshape(2, 5)
print("numray:\n", array1)
```

[3] ✓ 0.2s

```
... numray:
[[ 1  2  3  4  5]
 [ 6  7  8  9 10]]
```

```
array2 = np.arange(1, 21)
elements = array2[5:16]
print("numray_2:\n", elements)
```

[4] ✓ 0.0s

```
... numray_2:
[ 6  7  8  9 10 11 12 13 14 15 16]
```

```
series = pd.Series({'apples': 3, 'bananas': 2, 'oranges': 1})  
series['pears'] = 4  
print("\nfruit_list:\n", series)
```

✓ 0.2s

```
fruit_list:  
  apples      3  
bananas      2  
oranges      1  
pears        4  
dtype: int64
```

+ Code

+ Markdown

```
data = {
    'name': ['Aneesha', 'Boby', 'Aslam', 'David', 'Evan', 'Sahil', 'Godwin', 'Hafsa', 'Ihsan', 'Jack'],
    'age': [25, 30, 22, 40, 29, 35, 27, 33, 26, 31],
    'gender': ['F', 'M', 'M', 'M', 'F', 'M', 'F', 'F', 'M', 'M']
}
df = pd.DataFrame(data)
print("\nDataset:\n", df)
```

[6] ✓ 0.4s

Dataset:

	name	age	gender
0	Aneesha	25	F
1	Boby	30	M
2	Aslam	22	M
3	David	40	M
4	Evan	29	F
5	Sahil	35	M
6	Godwin	27	F
7	Hafsa	33	F
8	Ihsan	26	M
9	Jack	31	M

```
series = pd.Series
series['pears'] =
print("\nfruit_list
```

✓ 0.2s

```
fruit_list:
apples    3
bananas   2
oranges   1
pears     4
dtype: int64
```

Snipping Tool



```
df['occupation'] = ['Programmer', 'Manager', 'Analyst', 'Programmer', 'Manager',  
| | | | | | | | | | 'Analyst', 'Programmer', 'Manager', 'Analyst', 'Programmer']  
print("\nDataset:\n", df)
```

[7] ✓ 0.0s

...

Dataset:

	name	age	gender	occupation
0	Aneesha	25	F	Programmer
1	Boby	30	M	Manager
2	Aslam	22	M	Analyst
3	David	40	M	Programmer
4	Evan	29	F	Manager
5	Sahil	35	M	Analyst
6	Godwin	27	F	Programmer
7	Hafsa	33	F	Manager
8	Ihsan	26	M	Analyst
9	Jack	31	M	Programmer

```
df_filtered = df[df['age'] >= 30]
print("\nage>=30:\n", df_filtered)
```

[9] ✓ 0.0s

...

age>=30:

	name	age	gender	occupation
1	Boby	30	M	Manager
3	David	40	M	Programmer
5	Sahil	35	M	Analyst
7	Hafsa	33	F	Manager
9	Jack	31	M	Programmer