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## Python

1.Reverse a string "WorldWord". Hint: :: or join

Code :

```
basic.py
1 string = "WorldWord"
2 reversed_string = string[::-1]
3 print("Reversed String:", reversed_string)
```

Result :

```
PS C:\Users\Prathik.b\Desktop\Python-Prac> python basic.py
Reversed String: drowdlrow
```

2.Remove duplicates in ['dog','cat','tiger','dog','tiger'] Hint: use set

Code :

```
basic.py
1 Animallist = ['dog', 'cat', 'tiger', 'dog', 'tiger']
2 unique_list = list(set(Animallist))
3 print("List with duplicates removed:", unique_list)
4
```

Result:

```
PS C:\Users\Prathik.b\Desktop\Python-Prac> python basic.py
List with duplicates removed: ['tiger', 'cat', 'dog']
```

### 3. Perform union and intersection using Set.

Code:

```
basic.py
1  set1 = {1, 2, 3, 4, 5}
2  set2 = {4, 5, 6, 7, 8}
3
4  union_set = set1.union(set2)
5  print("Union:", union_set)
6
7  intersection_set = set1.intersection(set2)
8  print("Intersection:", intersection_set)
9
```

Result

:

```
PS C:\Users\Prathik.b\Desktop\Python-Prac> python basic.py
Union: {1, 2, 3, 4, 5, 6, 7, 8}
Intersection: {4, 5}
```

### 4. Create virtual environment and show installation of package matplotlib and import of modules for visualization.

```
C:\Users\Prathik.b>cd Desktop
C:\Users\Prathik.b\Desktop>python -m venv Prathik
C:\Users\Prathik.b\Desktop>cd Prathik
C:\Users\Prathik.b\Desktop\Prathik>.\Scripts\activate
```

```
(Prathik) C:\Users\Prathik.b\Desktop\Prathik>pip install matplotlib
Collecting matplotlib
  Using cached matplotlib-3.9.1.post1-cp312-cp312-win_amd64.whl.metadata (11 kB)
Collecting contourpy>=1.0.1 (from matplotlib)
  Using cached contourpy-1.2.1-cp312-cp312-win_amd64.whl.metadata (5.8 kB)
Collecting cycler>=0.10 (from matplotlib)
  Using cached cycler-0.12.1-py3-none-any.whl.metadata (3.8 kB)
Collecting fonttools>=4.22.0 (from matplotlib)
  Using cached fonttools-4.53.1-cp312-cp312-win_amd64.whl.metadata (165 kB)
Collecting kiwisolver>=1.3.1 (from matplotlib)
  Using cached kiwisolver-1.4.5-cp312-cp312-win_amd64.whl.metadata (6.5 kB)
Collecting numpy>=1.23 (from matplotlib)
  Using cached numpy-2.0.1-cp312-cp312-win_amd64.whl.metadata (60 kB)
Collecting packaging>=20.0 (from matplotlib)
  Using cached packaging-24.1-py3-none-any.whl.metadata (3.2 kB)
Collecting pillow>=8 (from matplotlib)
  Using cached pillow-10.4.0-cp312-cp312-win_amd64.whl.metadata (9.3 kB)
Collecting pyparsing>=2.3.1 (from matplotlib)
```

```

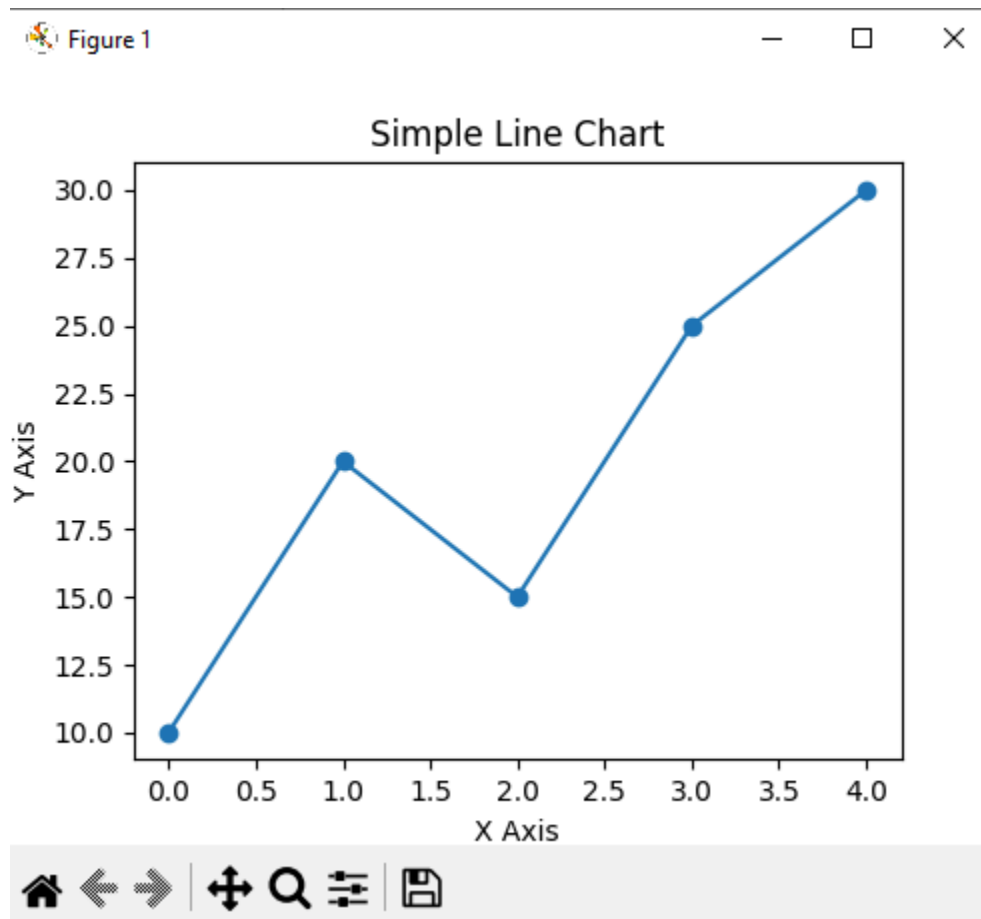
Using cached pyparsing-3.1.2-py3-none-any.whl.metadata (5.1 kB)
Collecting python-dateutil>=2.7 (from matplotlib)
Using cached python_dateutil-2.9.0.post0-py2.py3-none-any.whl.metadata (8.4 kB)
Collecting six>=1.5 (from python-dateutil>=2.7->matplotlib)
Using cached six-1.16.0-py2.py3-none-any.whl.metadata (1.8 kB)
Using cached matplotlib-3.9.1.post1-cp312-cp312-win_amd64.whl (8.0 MB)
Using cached contourpy-1.2.1-cp312-cp312-win_amd64.whl (189 kB)
Using cached cycler-0.12.1-py3-none-any.whl (8.3 kB)
Using cached fonttools-4.53.1-cp312-cp312-win_amd64.whl (2.2 MB)
Using cached kiwisolver-1.4.5-cp312-cp312-win_amd64.whl (56 kB)
Using cached numpy-2.0.1-cp312-cp312-win_amd64.whl (16.3 MB)
Using cached packaging-24.1-py3-none-any.whl (53 kB)
Using cached pillow-10.4.0-cp312-cp312-win_amd64.whl (2.6 MB)
Using cached pyparsing-3.1.2-py3-none-any.whl (103 kB)
Using cached python_dateutil-2.9.0.post0-py2.py3-none-any.whl (229 kB)
Using cached six-1.16.0-py2.py3-none-any.whl (11 kB)
Installing collected packages: six, pyparsing, pillow, packaging, numpy, kiwisolver, fonttools, cycler, python-dateutil,
contourpy, matplotlib
Successfully installed contourpy-1.2.1 cycler-0.12.1 fonttools-4.53.1 kiwisolver-1.4.5 matplotlib-3.9.1.post1 numpy-2.0.
1 packaging-24.1 pillow-10.4.0 pyparsing-3.1.2 python-dateutil-2.9.0.post0 six-1.16.0

[notice] A new release of pip is available: 24.0 -> 24.2
[notice] To update, run: python.exe -m pip install --upgrade pip

(Prathik) C:\Users\Prathik.b\Desktop\Prathik>python data.py

```

Output :



5. Create a range to display players list within Players class.

Code :

```
basic.py
1  class Players:
2      def __init__(self, players):
3          self.players = players
4
5      def displayPlayers(self):
6          for player in self.players:
7              print(player)
8
9  # Example usage
10 players = Players(['Prathik', 'Sidd', 'Dhanapal'])
11 players.displayPlayers()
```

Result :

```
PS C:\Users\Prathik.b\Desktop\Python-Prac> python basic.py
Prathik
Sidd
Dhanapal
```