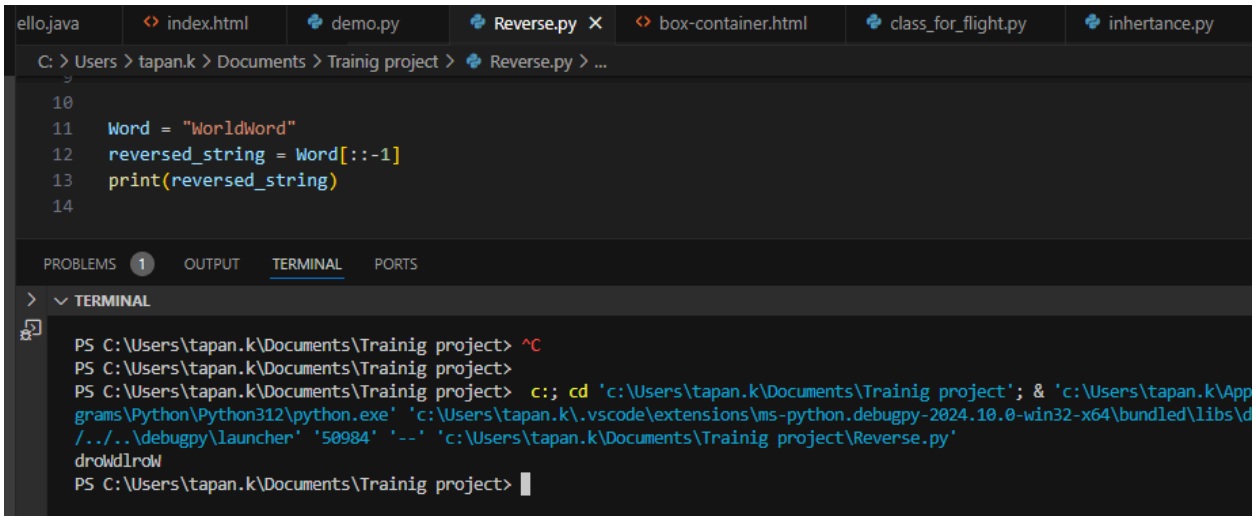
Python Programs

1.Reverse a string “WorldWord”?

Code:-

```
Word = "WorldWord"
 reversed_string = Word[::-1]
print(reversed_string)
```

Output:-

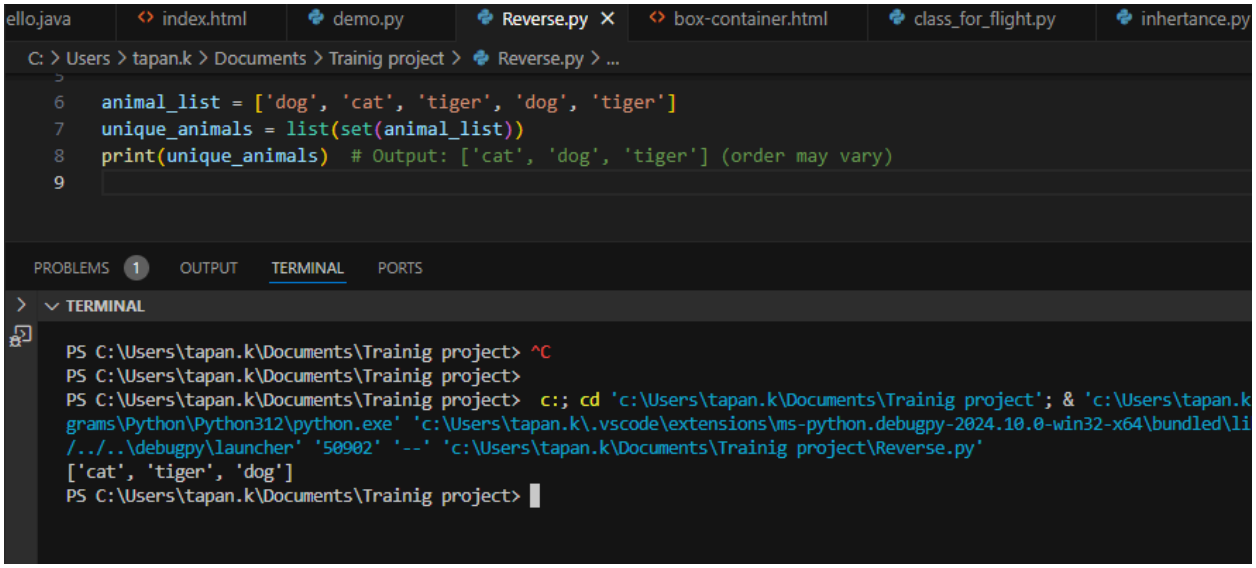


2.Remove duplicates in [’dog’,’cat’,’tiger’,’dog’, ‘tiger’] ?

Code:-

```
animal_list = ['dog', 'cat', 'tiger', 'dog', 'tiger']
unique_animals = list(set(animal_list))
print(unique_animals)
```

Output:-

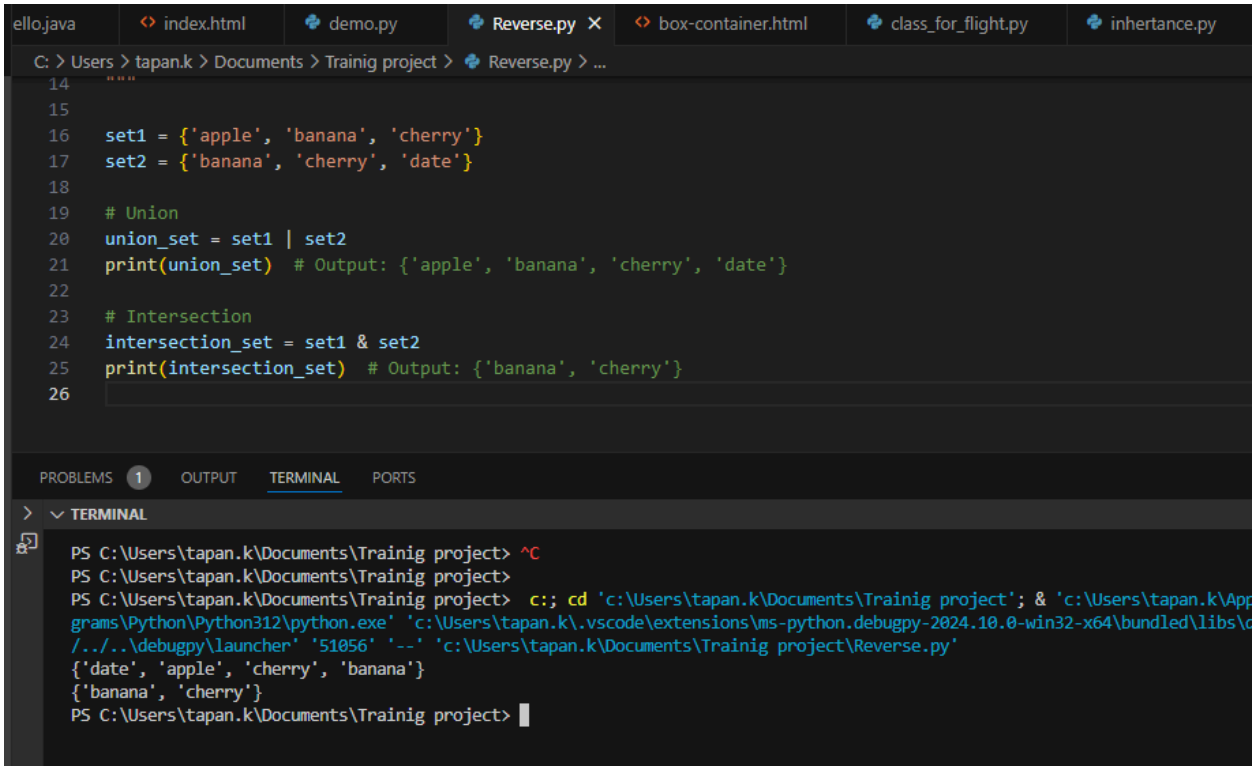


3. Perform union and intersection using Set ?

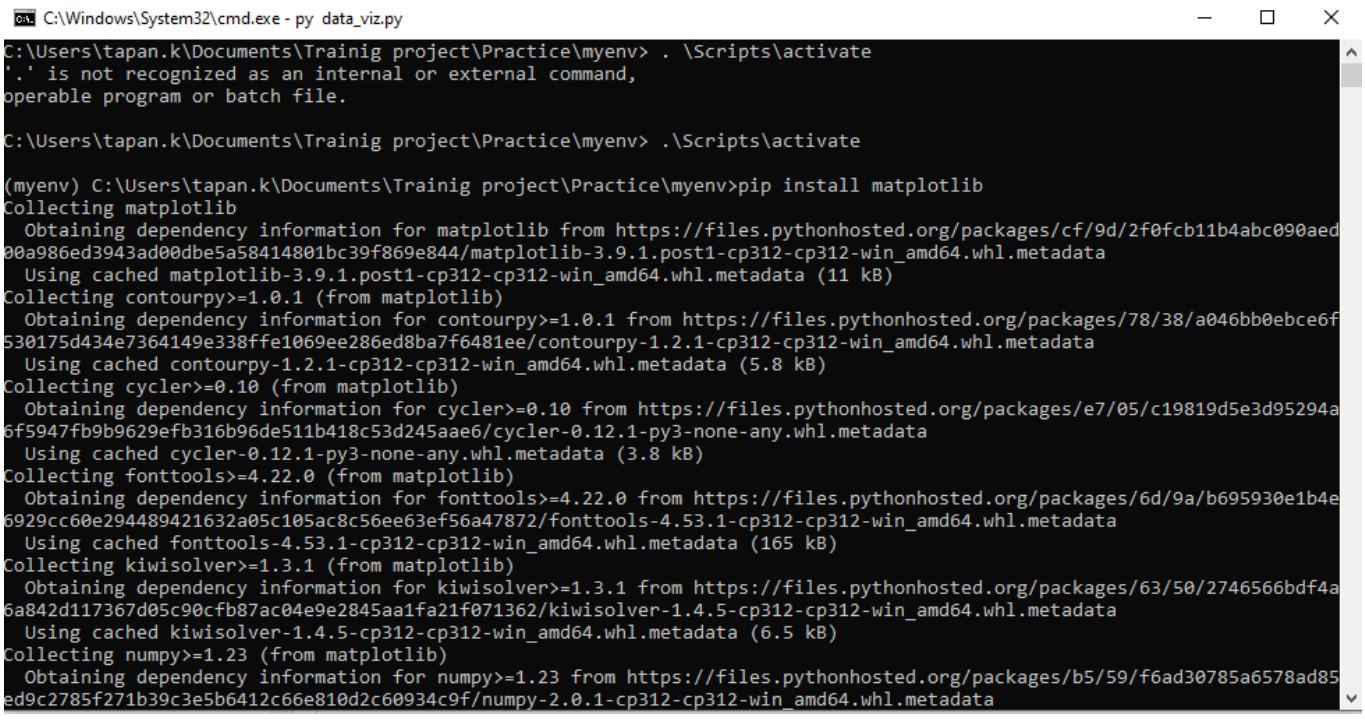
Code:-

```
set1 = {'apple', 'banana', 'cherry'}
set2 = {'banana', 'cherry', 'date'}

# Union
union_set = set1 | set2
print(union_set)  # Output: {'apple', 'banana', 'cherry', 'date'}

# Intersection
intersection_set = set1 & set2
print(intersection_set)
```

Output:-

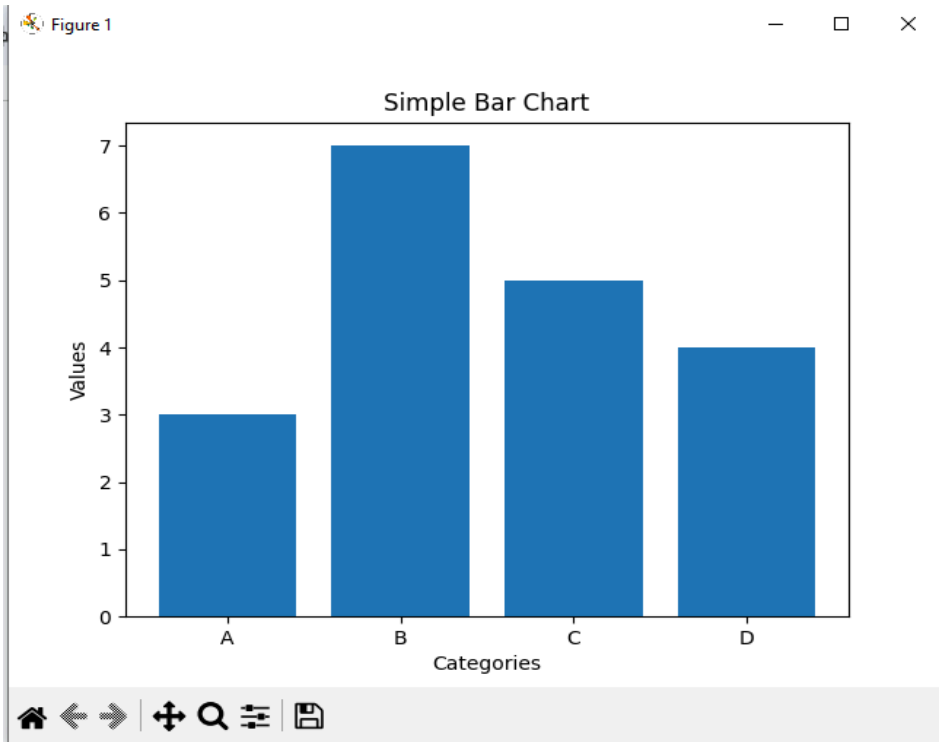


4. Create virtual environment and show installation of package matplotlib and import of modules for visualization?



```
C:\Windows\System32\cmd.exe - py  data_viz.py
  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)
  Obtaining dependency information for six>=1.5 from https://files.pythonhosted.org/packages/d9/5a/e7c31adbe875f2abbb91bd84cf2dc52d792b5a01506781dbcf25c91daf11/six-1.16.0-py2.py3-none-any.whl.metadata
  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: 23.2.1 -> 24.2
[notice] To update, run: python.exe -m pip install --upgrade pip

(myenv) C:\Users\tapan.k\Documents\Trainig project\Practice\myenv>cd
C:\Users\tapan.k\Documents\Trainig project\Practice\myenv

(myenv) C:\Users\tapan.k\Documents\Trainig project\Practice\myenv>py data_viz.py
```

Output:-



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

Code:-

```
class Players:
    def __init__(self, player_list):
        self.player_list = player_list

    def display_players(self, start, end):
        if 0 <= start < len(self.player_list) and 0 < end <= len(self.player_list):
            for player in self.player_list[start:end]:
                print(player)
        else:
            print("Invalid range.")


players = Players(["Player1", "Player2", "Player3", "Player4", "Player5"])
players.display_players(1, 4)
```

Output:-