DATE :12.08.2024

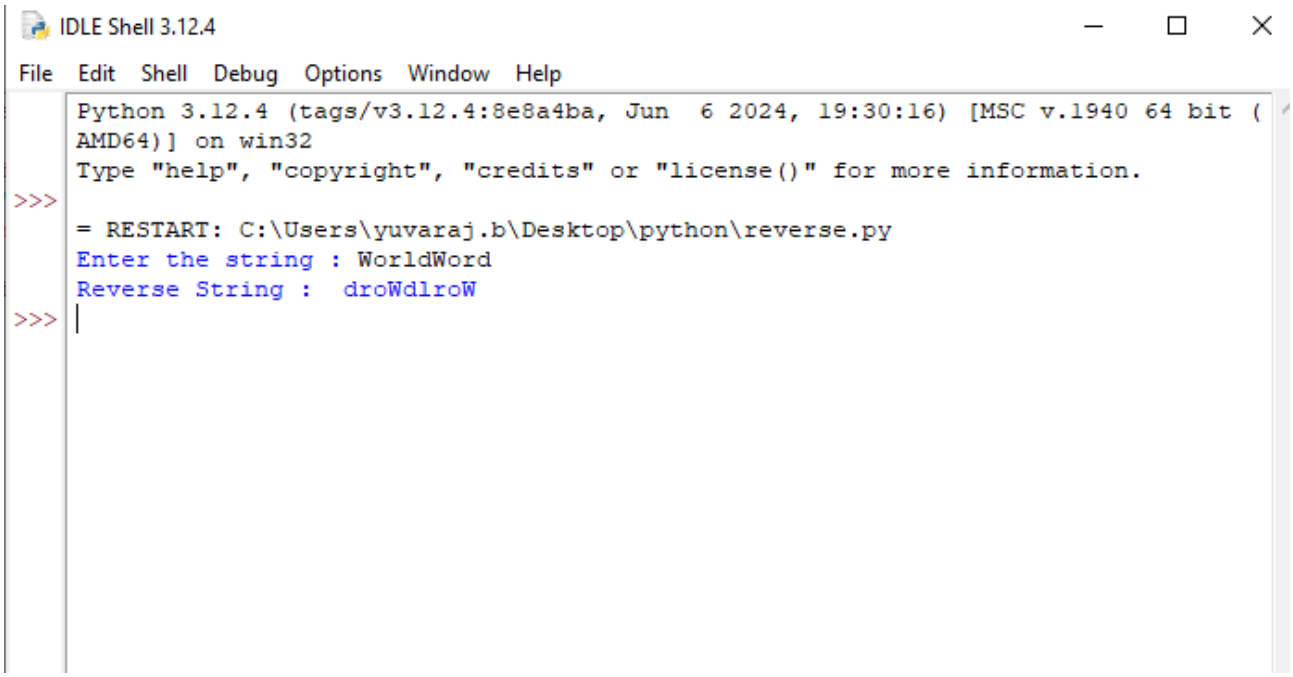
PYTHON

1.Reverse a string “WorldWord”.

Code:

```
#Reverse String
a=input("Enter the string : ")
t=""
for i in a:
   t=i+t
print("Reverse String : ",t)
```

OUTPUT:



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

CODE:

```
animals = ['dog', 'cat', 'tiger', 'dog', 'tiger']
unique = list(set(animals))
print(unique)
```

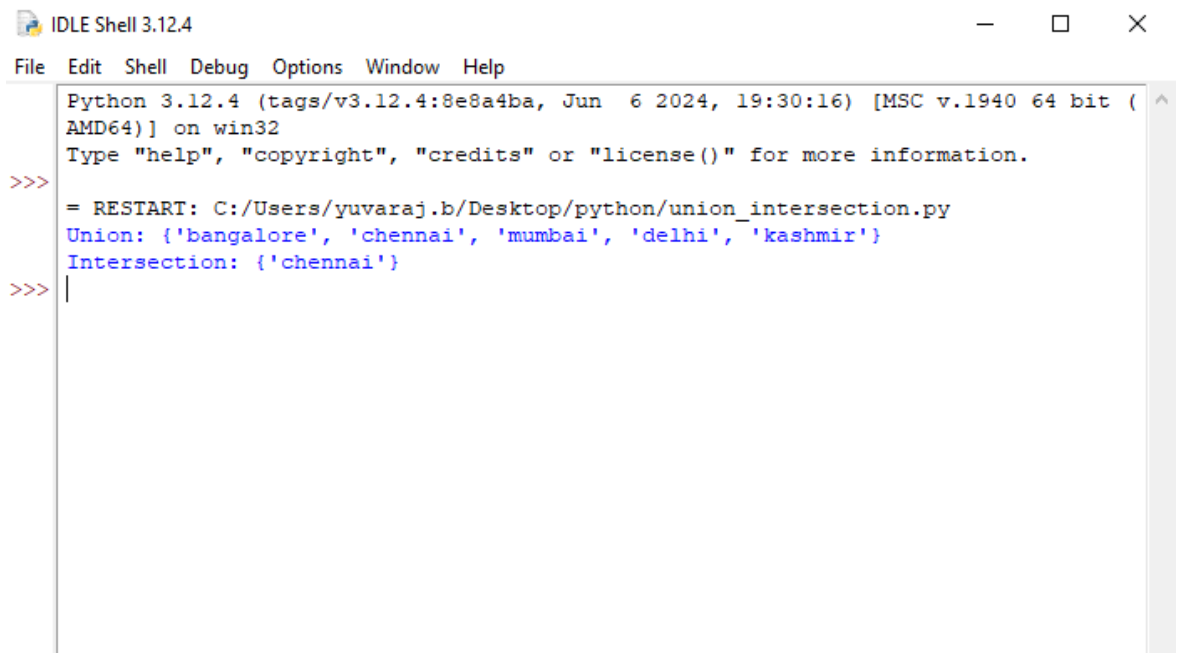
OUTPUT:

3. Perform union and intersection using Set

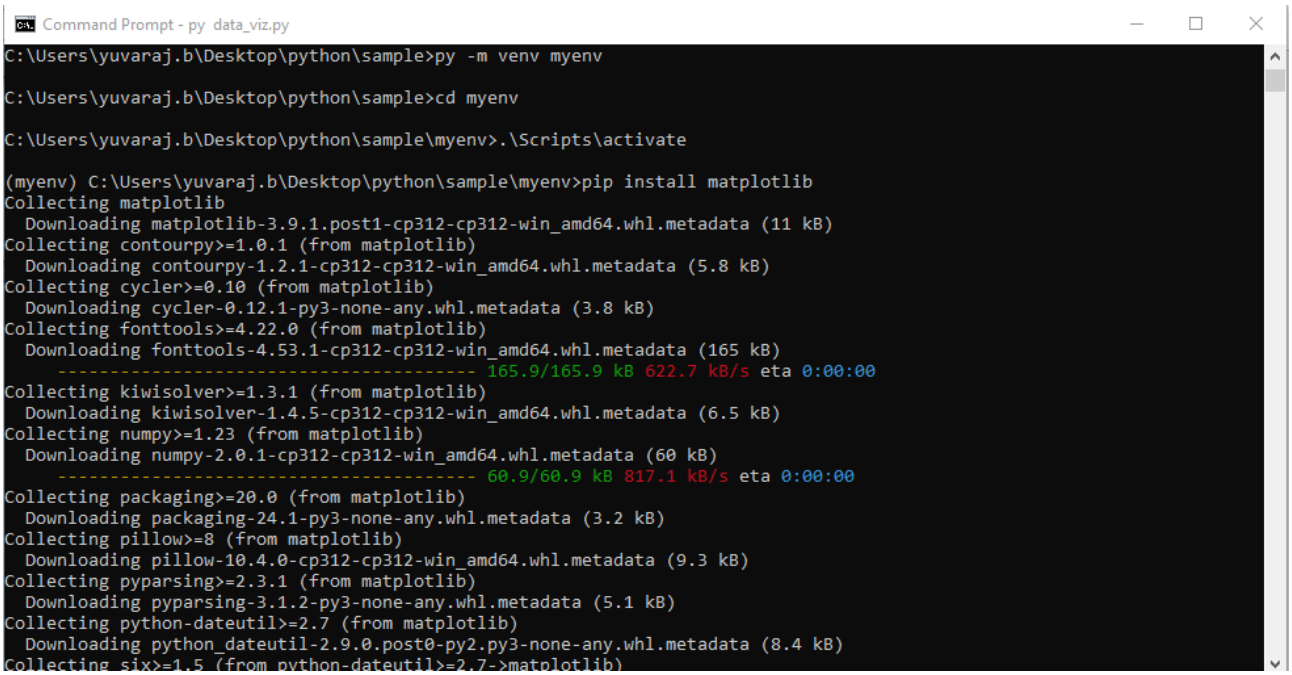
CODE:

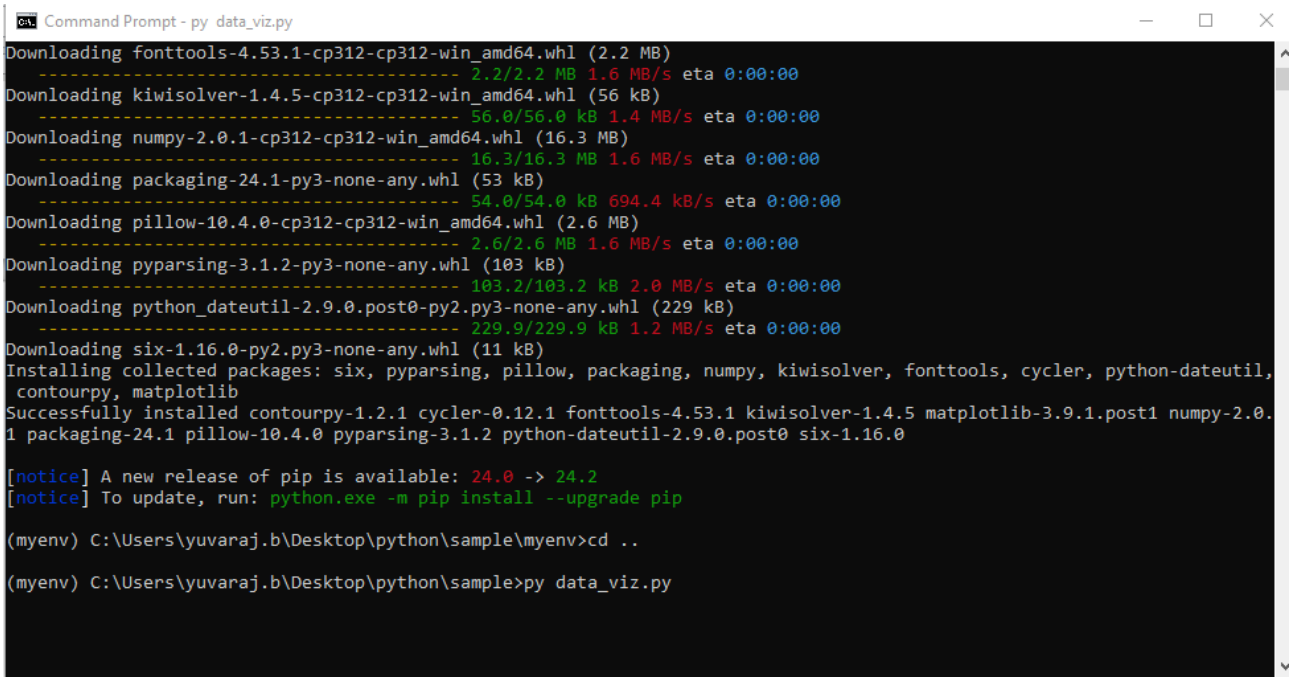
```
# Define two sets
set1 = {'chennai', 'mumbai', 'delhi'}
set2 = {'chennai', 'bangalore', 'kashmir'}

# Union of set1 and set2
union_set = set1 | set2
print("Union:", union_set)

# Intersection of set1 and set2
intersection_set = set1 & set2
print("Intersection:", intersection_set)
```

OUTPUT:



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

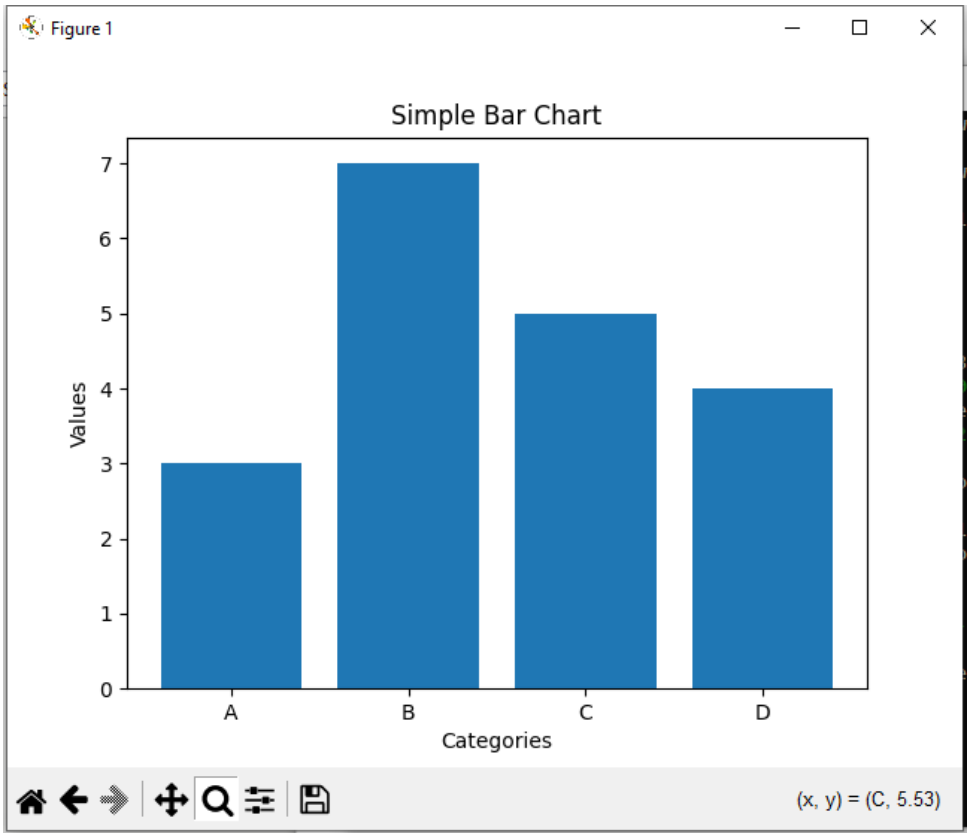




data_viz.py:

```
import matplotlib.pyplot as plt
def simple_bar_chart():
    # Sample data
    categories = ['A', 'B', 'C', 'D']
    values = [3, 7, 5, 4]
    # Create a bar chart
    plt.bar(categories, values)
    # Add title and labels
    plt.title('Simple Bar Chart')
    plt.xlabel('Categories')
    plt.ylabel('Values')
    # Save the plot as a PNG file
    plt.savefig('bar_chart.png')
    # Display the plot
    plt.show()

if __name__ == "__main__":
    simple_bar_chart()
```

OUTPUT:



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

CODE:

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

    def display_players_in_range(self, start, end):
        # Ensure the start and end indices are within bounds
        start = max(0, start)
        end = min(len(self.players_list), end)

        # Display the players within the specified range
        for i in range(start, end):
            print(self.players_list[i])

# Example usage:
players = Players(['Ashwin', 'Bumrah', 'Chahal', 'Dhoni', 'Rohit', 'Virat'])
players.display_players_in_range(1, 4)  # Displays players from index 1 to 3 (Bob, Charlie, David)
```

OUTPUT: