

12-08-2024

DAILY TASK

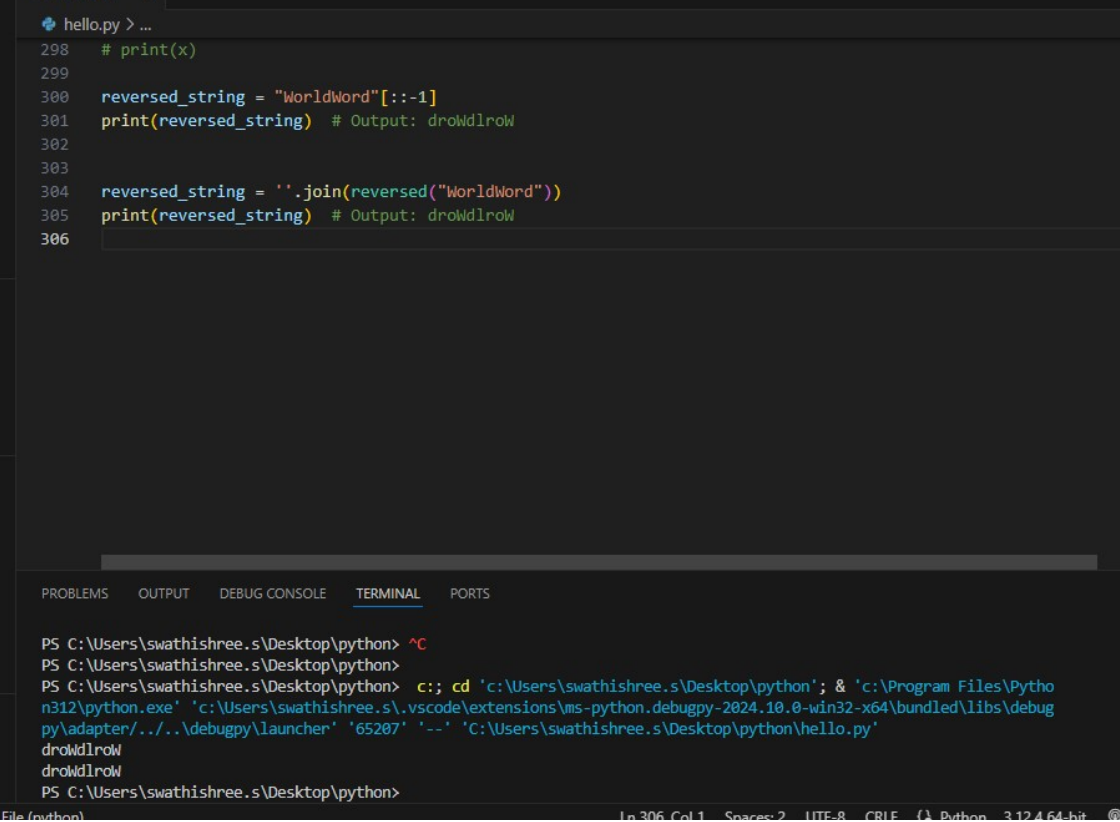
1. Reverse a string “WorldWord”. Hint: :: or join

CODE:

```
reversed_string = "WorldWord"[::-1]
print(reversed_string) # Output: droWdlroW

reversed_string = ''.join(reversed("WorldWord"))
print(reversed_string) # Output: droWdlroW
```

OUTPUT:



```
hello.py > ...
298 # print(x)
299
300 reversed_string = "WorldWord"[::-1]
301 print(reversed_string) # Output: droWdlroW
302
303
304 reversed_string = ''.join(reversed("WorldWord"))
305 print(reversed_string) # Output: droWdlroW
306
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\swathishree.s\Desktop\python> ^C
PS C:\Users\swathishree.s\Desktop\python>
PS C:\Users\swathishree.s\Desktop\python> c:: cd 'C:\Users\swathishree.s\Desktop\python'; & 'c:\Program Files\Python312\python.exe' 'c:\Users\swathishree.s\vscode\extensions\ms-python.debugpy-2024.10.0-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher' '65207' '--' 'C:\Users\swathishree.s\Desktop\python\hello.py'
droWdlroW
droWdlroW
PS C:\Users\swathishree.s\Desktop\python>
```

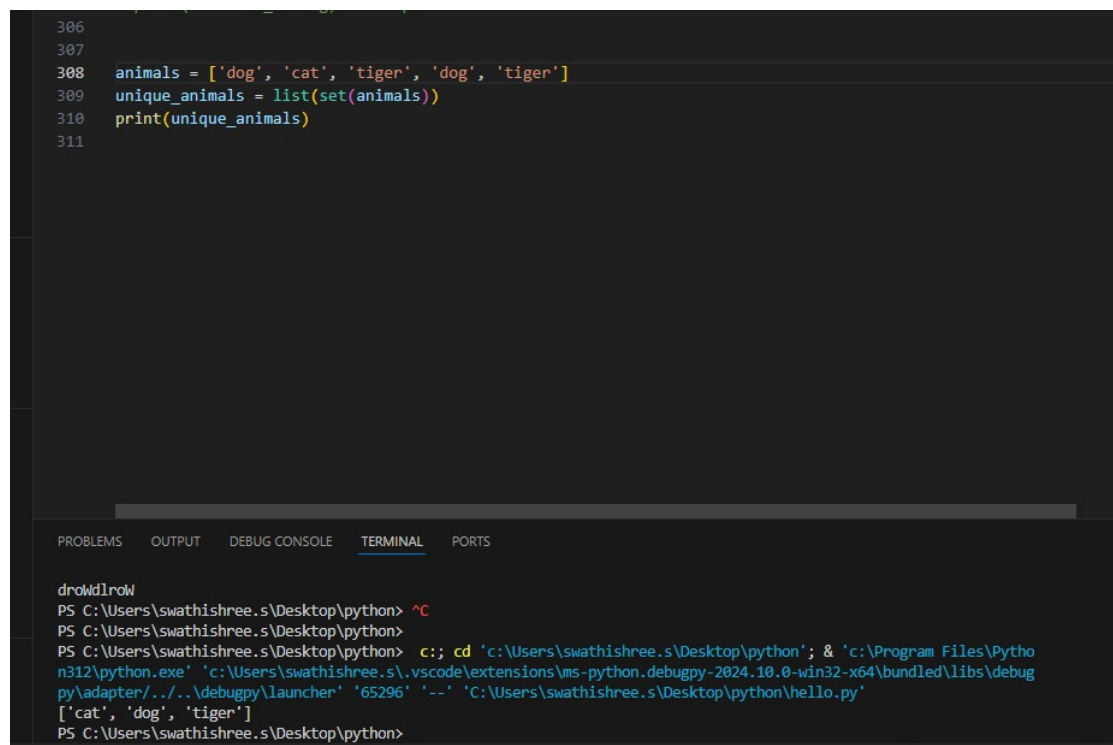
File (python) Ln 306 Col 1 Spaces: 2 UTF-8 GBLE (A) Python 3.12.4 64-bit @

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

CODE:

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

OUTPUT:



```
306
307
308 animals = ['dog', 'cat', 'tiger', 'dog', 'tiger']
309 unique_animals = list(set(animals))
310 print(unique_animals)
311
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
drowd1row
PS C:\Users\swathishree.s\Desktop\python> ^C
PS C:\Users\swathishree.s\Desktop\python>
PS C:\Users\swathishree.s\Desktop\python> c:; cd 'c:\Users\swathishree.s\Desktop\python'; & 'c:\Program Files\Python312\python.exe' 'c:\Users\swathishree.s\.vscode\extensions\ms-python.debugpy-2024.10.0-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher' '65296' '--' 'C:\Users\swathishree.s\Desktop\python\hello.py'
['cat', 'dog', 'tiger']
PS C:\Users\swathishree.s\Desktop\python>
```

3. Perform union and intersection using Set

CODE:

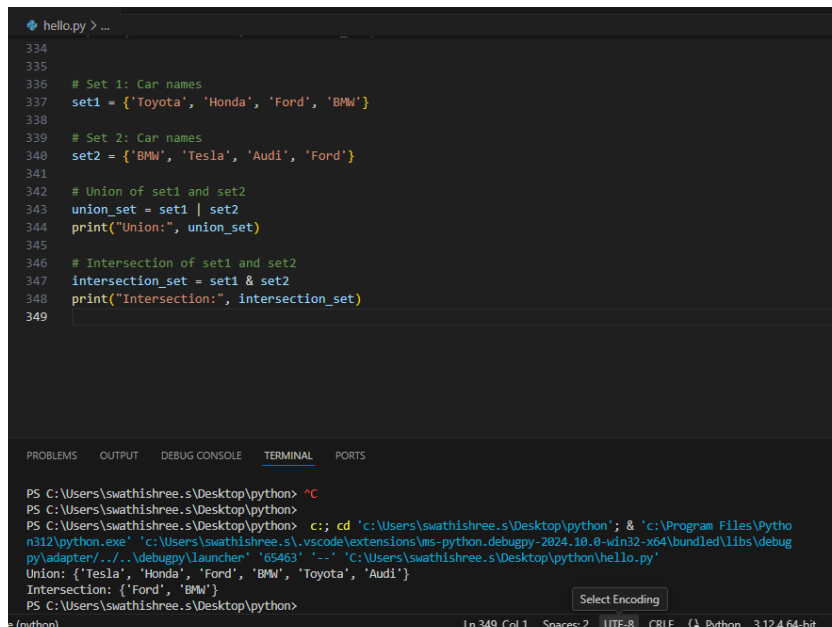
```
set1 = {'Toyota', 'Honda', 'Ford', 'BMW'}
```

```
set2 = {'BMW', 'Tesla', 'Audi', 'Ford'}
```

```
union_set = set1 | set2  
print("Union:", union_set)
```

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

OUTPUT:



The screenshot shows a VS Code editor window with a file named 'hello.py'. The code in the editor defines two sets of car names and calculates their union and intersection. The terminal output shows the results of these operations.

```
334  
335  
336 # Set 1: Car names  
337 set1 = {'Toyota', 'Honda', 'Ford', 'BMW'}  
338  
339 # Set 2: Car names  
340 set2 = {'BMW', 'Tesla', 'Audi', 'Ford'}  
341  
342 # Union of set1 and set2  
343 union_set = set1 | set2  
344 print("Union:", union_set)  
345  
346 # Intersection of set1 and set2  
347 intersection_set = set1 & set2  
348 print("Intersection:", intersection_set)  
349
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\swathishree.s\Desktop\python> ^C  
PS C:\Users\swathishree.s\Desktop\python>  
PS C:\Users\swathishree.s\Desktop\python> c:: cd 'c:\Users\swathishree.s\Desktop\python'; & 'c:\Program Files\Python312\python.exe' 'c:\Users\swathishree.s\.vscode\extensions\ms-python.debugpy-2024.10.8-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher' '65463' '--' 'C:\Users\swathishree.s\Desktop\python\hello.py'  
Union: {'Tesla', 'Honda', 'Ford', 'BMW', 'Toyota', 'Audi'}  
Intersection: {'Ford', 'BMW'}  
PS C:\Users\swathishree.s\Desktop\python>
```

Select Encoding

Ln 349, Col 1 Sources: 2 UTF-8 GBK Python 3.12.4 64-bit

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

ANSWER:

```
Command Prompt - python_data_viz.py
Microsoft Windows [Version 10.0.19045.4651]
(c) Microsoft Corporation. All rights reserved.

C:\Users\swathishree.s>cd C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE

C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE>python -m venv env

C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE>cd env

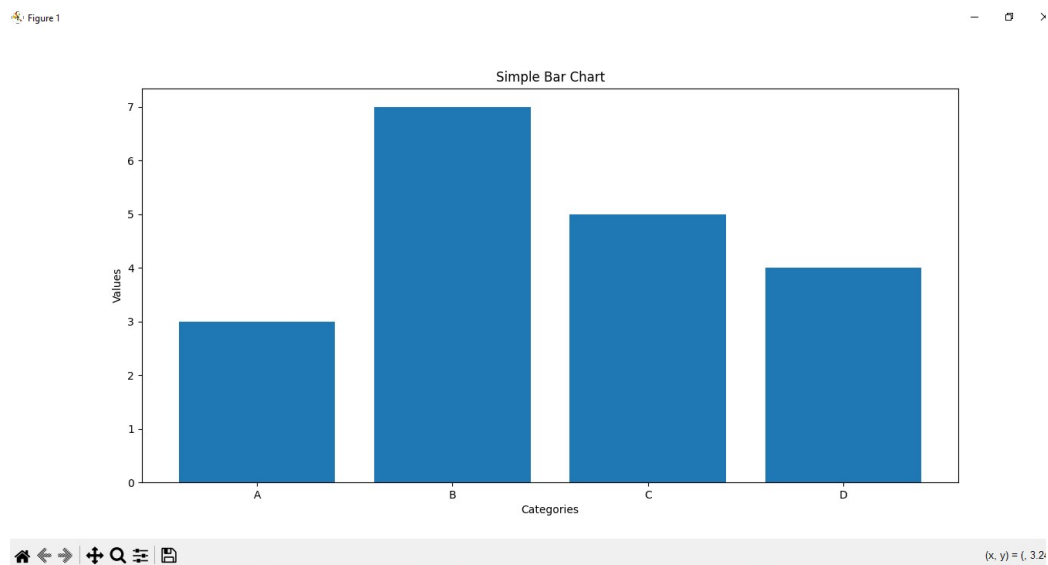
C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE\env>.\Scripts\activate

(env) C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE\env>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 (183 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

(env) C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE\env>cd ..

(env) C:\Users\swathishree.s\Desktop\PYTHON_SAMPLE>python data_viz.py
```



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

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

    def display_players(self, start, end):

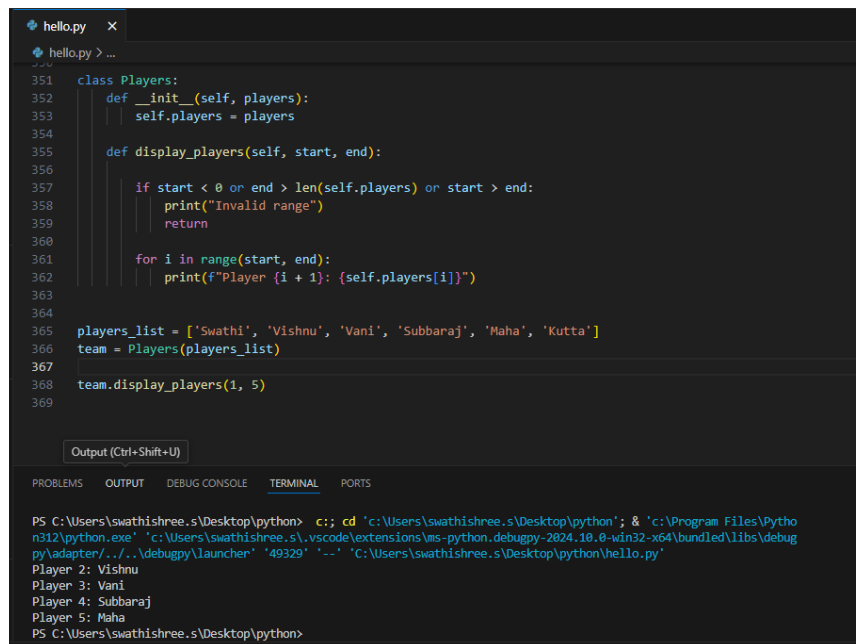
        if start < 0 or end > len(self.players) or start > end:
            print("Invalid range")
            return

        for i in range(start, end):
            print(f"Player {i + 1}: {self.players[i]}")

players_list = ['Swathi', 'Vishnu', 'Vani', 'Subbaraj', 'Maha', 'Kutta']
team = Players(players_list)

team.display_players(1, 5)
```

OUTPUT:



The image shows a VS Code editor window with a file named `hello.py`. The code defines a `Players` class with an `__init__` method and a `display_players` method. The `display_players` method checks if the `start` and `end` indices are valid and then prints the names of the players in the range. Below the class definition, a list of player names is created, an instance of the `Players` class is created, and the `display_players` method is called with `start=1` and `end=5`.

```
351 class Players:
352     def __init__(self, players):
353         self.players = players
354
355     def display_players(self, start, end):
356
357         if start < 0 or end > len(self.players) or start > end:
358             print("Invalid range")
359             return
360
361         for i in range(start, end):
362             print(f"Player {i + 1}: {self.players[i]}")
363
364
365 players_list = ['Swathi', 'Vishnu', 'Vani', 'Subbaraj', 'Maha', 'Kutta']
366 team = Players(players_list)
367
368 team.display_players(1, 5)
369
```

The terminal output shows the command used to run the script and the resulting output of the program:

```
PS C:\Users\swathishree.s\Desktop\python> c:: cd 'C:\Users\swathishree.s\Desktop\python'; & 'C:\Program Files\Python312\python.exe' 'C:\Users\swathishree.s\vscode\extensions\ms-python.debugpy-2024.10.8-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher' '49329' '-' 'C:\Users\swathishree.s\Desktop\python\hello.py'
Player 2: Vishnu
Player 3: Vani
Player 4: Subbaraj
Player 5: Maha
PS C:\Users\swathishree.s\Desktop\python>
```