



BP D42_Pythonproject Version control

Current File

2_Datastructre.py Data_structures.py

```
1  ##Q1.Create a list of 5 random numbers and print the list
2  import random
3  numbers = [random.randint(1, 100) for _ in range(5)]
4  print("List of random numbers:", numbers)
5  ##Q2.Insert 3 new values to the list and print the updated list
6  numbers.extend([200, 300, 400]) # Adding 3 new values
7  print("Updated list:", numbers)
```

Run 2_Datastructre

C:\Users\anrut\PycharmProjects\PythonProject\042_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py

List of random numbers: [21, 40, 92, 89, 81]

Updated list: [21, 40, 92, 89, 81, 200, 300, 400]

Process finished with exit code 0

D: > DSML > Python > 2_Datastructre.py 7:32 CRLF UTF-8 4 spaces Python 3.13 (D42_Pythonproject)

Very high UV Now

Search

ENG IN 15:01 22-12-2024

PyCharm IDE interface showing a Python project named "D42_Pythonproject". The editor displays a file named "2_Datastructre.py" with the following code:

```
1  ##Q1.Create a list of 5 random numbers and print the list
2  import random
3  numbers = [random.randint(1, 100) for _ in range(5)]
4  print("List of random numbers:", numbers)
5  ##Q2.Insert 3 new values to the list and print the updated list
6  numbers.extend([200, 300, 400]) # Adding 3 new values
7  print("Updated list:", numbers)
8  ##Q3.Use a for loop to print each element in the list
9  for num in numbers:
10     print(num)
```

The Run console shows the output of the script:

```
C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
List of random numbers: [41, 10, 10, 53, 75]
Updated list: [41, 10, 10, 53, 75, 200, 300, 400]
41
10
10
53
75
200
300
400
```

The bottom status bar indicates the file is "2_Datastructre.py" in the "D:\DSML\Python" directory, using Python 3.13 (D42_Pythonproject) with 10:15 CRLF UTF-8 4 spaces.

Windows taskbar at the bottom shows the date and time as 15:04 22-12-2024, along with system icons for network, volume, and battery.

PyCharm IDE interface showing a Python project named "D42_Pythonproject". The editor displays a file named "2_Datastructure.py" with the following code:

```
9  # # #Q3. Use a for loop to print each element in the list
10 # # for num in numbers:
11 # #     print(num)
12 ##Dictionary
13 ##Q1: Create a dictionary with keys name, age, and address and values John, 25, and New York.
14
15 person = {
16     "name": "John",
17     "age": 25,
18     "address": "New York"
19 }
20 print("Dictionary:", person)
```

The Run console shows the output:

```
C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructure.py
Dictionary: {'name': 'John', 'age': 25, 'address': 'New York'}
Process finished with exit code 0
```

The bottom status bar indicates the file path: "D:\DSML\Python\2_Datastructure.py", encoding: "UTF-8", and Python version: "Python 3.13 (D42_Pythonproject)".

PyCharm IDE interface showing a Python script and its execution output.

File Explorer: D42_Pythonproject, Version control, 2_Datastructre.py, Data_structures.py

Code Editor:

```
12  ##Dictionary
13  ##Q1: Create a dictionary with keys name, age, and address and values John, 25, and New York.
14  person = {
15      "name": "John",
16      "age": 25,
17      "address": "New York"
18  }
19  print("Dictionary:", person)
20  ##Q2: Add a new key-value pair with key phone and value 1234567890.
21
22  person["phone"] = "1234567890"
23  print("Updated dictionary:", person)
```

Run Console:

```
C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
Dictionary: {'name': 'John', 'age': 25, 'address': 'New York'}
Updated dictionary: {'name': 'John', 'age': 25, 'address': 'New York', 'phone': '1234567890'}

Process finished with exit code 0
```

Bottom Bar: D: > DSML > Python > 2_Datastructre.py | 23:37 | CRLF | UTF-8 | 4 spaces | Python 3.13 (D42_Pythonproject)

Windows Taskbar: Finance headline, GST Council reje..., Search, 23:37, ENG IN, 15:09, 22-12-2024

BP D42_Pythonproject Version control Current File

2_Datastructre.py Data_structures.py

```
20 # ##Q2: Add a new key-value pair with key phone and value 1234567890.
21 #
22 # person["phone"] = "1234567890"
23 # print("Updated dictionary:", person)
24
25
26 ##Set
27 ##Q1: Create a set with values 1, 2, 3, 4, and 5.
28 my_set = {1, 2, 3, 4, 5}
29 print("Set:", my_set)
30
31
```

Run 2_Datastructre

C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
Set: {1, 2, 3, 4, 5}

Process finished with exit code 0

D:\DSML\Python> 2_Datastructre.py 30:1 CRLF UTF-8 4 spaces Python 3.13 (D42_Pythonproject)

32°C Mostly sunny Search 22-12-2024 15:13

PyCharm IDE interface showing a Python project named "D42_Pythonproject". The editor displays a file named "2_Datastructre.py" with the following code:

```
26  ##Set
27  ##Q1: Create a set with values 1, 2, 3, 4, and 5.
28  my_set = {1, 2, 3, 4, 5}
29  print("Set:", my_set)
30
31  ##Q2: Add the value 6 to the set.
32
33  my_set.add(6)
34  print("Set after adding 6:", my_set)
35  💡
36
37
```

The Run console shows the output of the script:

```
Run 2_Datastructre x
C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
Set: {1, 2, 3, 4, 5}
Set after adding 6: {1, 2, 3, 4, 5, 6}
Process finished with exit code 0
```

The bottom status bar indicates the file path: "D:\DSML\Python\2_Datastructre.py", encoding: "UTF-8", and Python version: "Python 3.13 (D42_Pythonproject)".

Windows taskbar at the bottom shows the date and time: "22-12-2024 15:14".

BP D42_Pythonproject Version control

Current File

2_Datastructure.py Data_structures.py

```
26 ##Set
27 ##Q1: Create a set with values 1, 2, 3, 4, and 5.
28 my_set = {1, 2, 3, 4, 5}
29 print("Set:", my_set)
30
31 ##Q2: Add the value 6 to the set.
32 my_set.add(6)
33 print("Set after adding 6:", my_set)
34
35 ##Q3: Remove the value 3 from the set.
36 my_set.discard(3) # Use discard to avoid error if 3 doesn't exist
37 print("Set after removing 3:", my_set)
```

Run 2_Datastructure

C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructure.py

Set: {1, 2, 3, 4, 5}

Set after adding 6: {1, 2, 3, 4, 5, 6}

Set after removing 3: {1, 2, 4, 5, 6}

Process finished with exit code 0

D:\DSML\Python\2_Datastructure.py 35:39 CRLF UTF-8 4 spaces Python 3.13 (D42_Pythonproject)

32°C Mostly sunny

Search

ENG IN 15:16 22-12-2024

BP D42_Pythonproject Version control Current File

2_Datastructre.py Data_structures.py

```
34 #
35 ###Q3: Remove the value 3 from the set.
36 # my_set.discard(3) # Use discard to avoid error if 3 doesn't exist
37 # print("Set after removing 3:", my_set)
38 ##tuple
39
40 ##Q1: Create a tuple with values 1, 2, 3, and 4.
41
42 my_tuple = (1, 2, 3, 4)
43 print("Tuple:", my_tuple)
44
45
```

Run 2_Datastructre

C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
Tuple: (1, 2, 3, 4)
Process finished with exit code 0

D: > DSML > Python > 2_Datastructre.py 51:1 (84 chars, 4 line breaks) CRLF UTF-8 4 spaces Python 3.13 (D42_Pythonproject)

32°C Mostly sunny Search 15:21 22-12-2024

PyCharm IDE interface showing a Python project named "D42_Pythonproject". The editor displays a file named "2_Datastructre.py" with the following code:

```
40  ##Q1: Create a tuple with values 1, 2, 3, and 4.
41
42  my_tuple = (1, 2, 3, 4)
43  print("Tuple:", my_tuple)
44  ##Q2: Print the length of the tuple.
45  print("Length of tuple:", len(my_tuple))
46
```

The Run console shows the output of the code:

```
C:\Users\amrut\PycharmProjects\PythonProject\D42_Pythonproject\.venv\Scripts\python.exe D:\DSML\Python\2_Datastructre.py
Tuple: (1, 2, 3, 4)
Length of tuple: 4
Process finished with exit code 0
```

The bottom status bar indicates the file path: "D:\DSML\Python\2_Datastructre.py", encoding: "UTF-8", and Python version: "Python 3.13 (D42_Pythonproject)".

Windows taskbar at the bottom shows the date and time: "22-12-2024 15:22".