

Lab Assignment 12

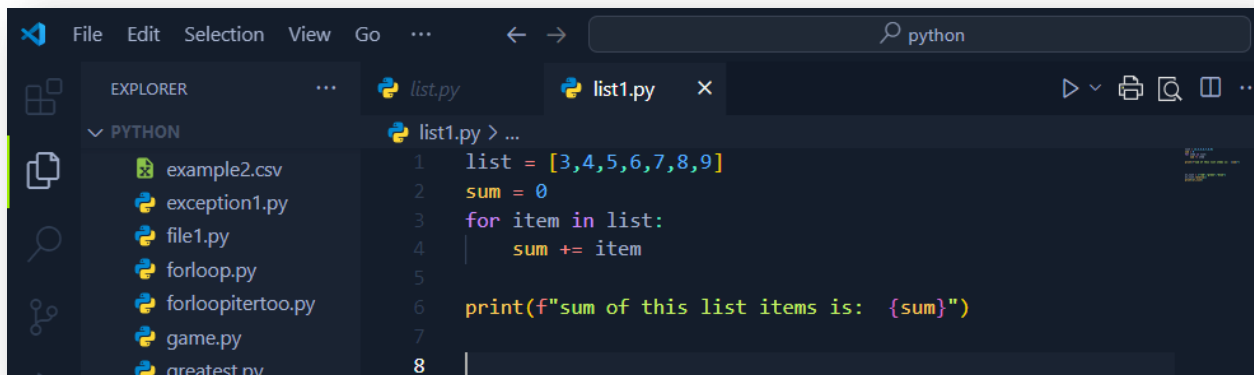
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Topic: List

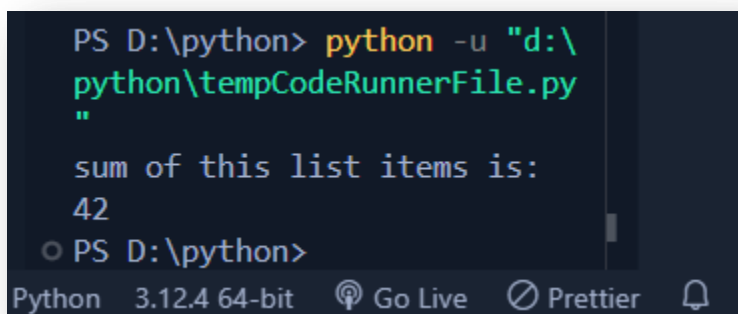
1. Write a Python program to sum all the items in a list.

Ans:

A screenshot of the Visual Studio Code editor interface. The Explorer pane on the left shows a file named 'list1.py' selected. The main editor area displays the code for 'list1.py'. The code defines a list [3, 4, 5, 6, 7, 8, 9], initializes a variable 'sum' to 0, and uses a for loop to iterate through the list, adding each element to 'sum'. Finally, it prints the sum using an f-string.

```
list1.py > ...
1 list = [3,4,5,6,7,8,9]
2 sum = 0
3 for item in list:
4     sum += item
5
6 print(f"sum of this list items is: {sum}")
7
8
```

Output:

A screenshot of a terminal window with a dark background. It shows the command 'python -u "d:\python\tempCodeRunnerFile.py"' being executed. The output of the program is displayed as 'sum of this list items is:' followed by '42' on the next line. The terminal prompt 'PS D:\python>' is visible at the bottom.

```
PS D:\python> python -u "d:\python\tempCodeRunnerFile.py"
sum of this list items is:
42
PS D:\python>
```

2. Write a Python program to traverse a given list in reverse order, and print the elements with the original index.

Original list: ['red', 'green', 'white', 'black'] Traverse the said list in reverse order: black white green red.

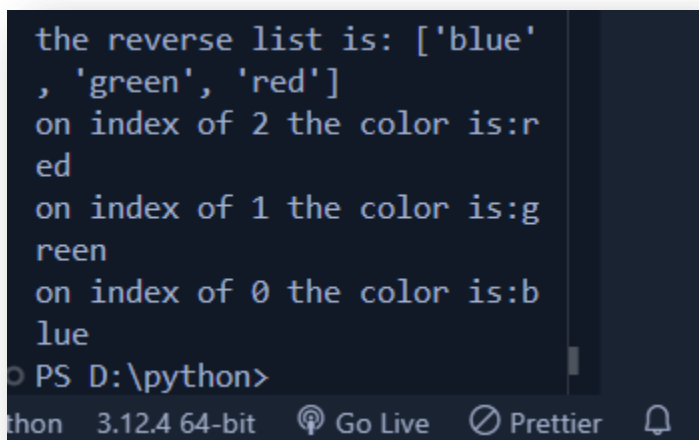
Ans:



```
8
9
10
11 or_list = ["red","green","blue"]
12 or_list.reverse()
13 print(f"the reverse list is: {or_list}")
14 for ind,i in reversed(list(enumerate(or_list))):
15     print(f"on index of {ind} the color is:{i}")
```

The screenshot shows a code editor with a file explorer on the left containing various Python files. The main editor area displays the Python code above. The status bar at the bottom indicates 'Ln 15, Col 49', 'Spaces: 4', 'UTF-8', and 'CRLF'.

output:



```
the reverse list is: ['blue'
, 'green', 'red']
on index of 2 the color is:r
ed
on index of 1 the color is:g
reen
on index of 0 the color is:b
lue
PS D:\python>
```

The screenshot shows a terminal window with the output of the Python code. The output is displayed in a dark-themed terminal with a light blue cursor. The status bar at the bottom shows 'thon 3.12.4 64-bit', 'Go Live', 'Prettier', and a bell icon.