

Program1: Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number.

- Expected run of this program looks like the following:

Enter a number: 10

Sum of numbers to 10 is 55

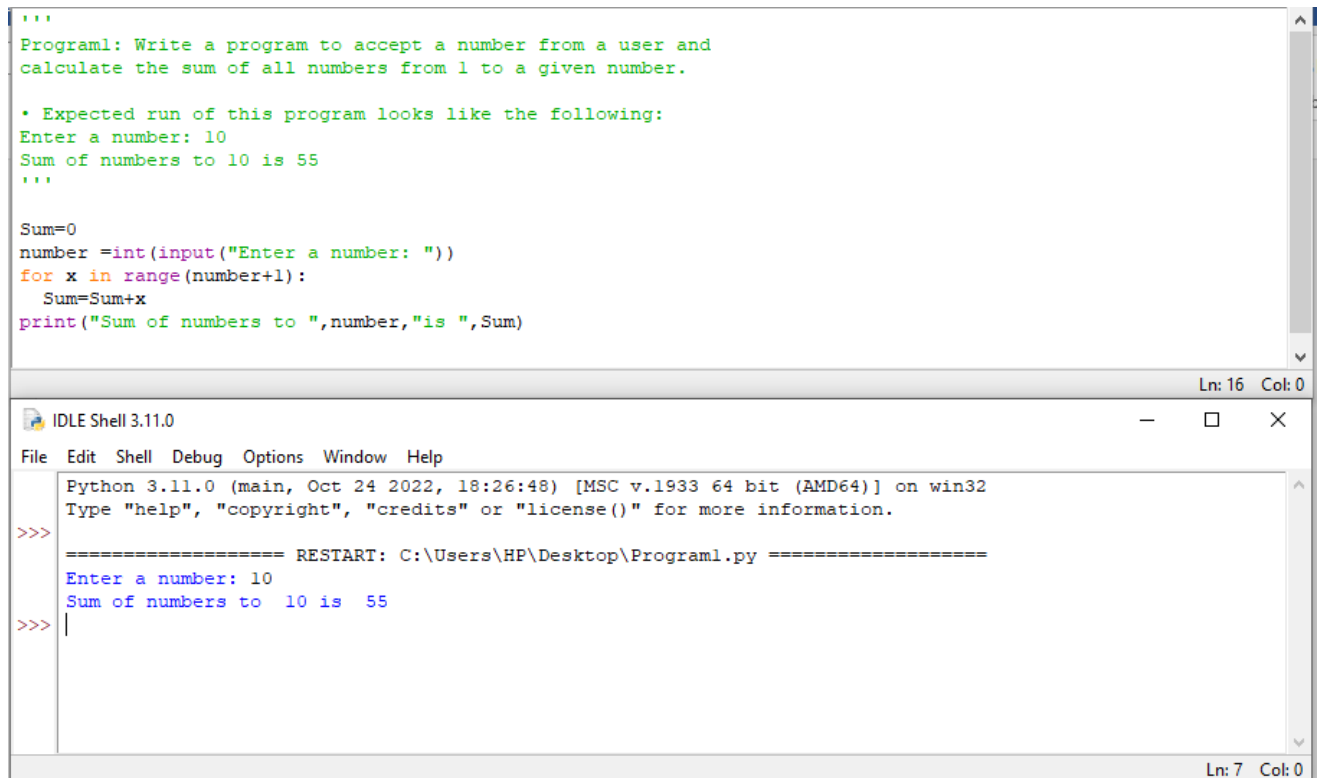
The Code

```
'''
Program1: Write a program to accept a number from a user and
calculate the sum of all numbers from 1 to a given number.

• Expected run of this program looks like the following:
Enter a number: 10
Sum of numbers to 10 is 55

'''
Sum=0
number =int(input("Enter a number: "))
for x in range(number+1):
    Sum=Sum+x
print("Sum of numbers to ",number,"is ",Sum)
```

The output:



The screenshot displays a Python IDE window titled 'IDLE Shell 3.11.0'. The top pane shows the same code as the 'The Code' section. The bottom pane shows the execution output, which matches the expected run described in the text. The output includes the program description, the expected run example, and the actual execution results for the input '10'.

```
'''
Program1: Write a program to accept a number from a user and
calculate the sum of all numbers from 1 to a given number.

• Expected run of this program looks like the following:
Enter a number: 10
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```

Ln: 16 Col: 0

Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

```
>>> ===== RESTART: C:\Users\HP\Desktop\Program1.py =====
Enter a number: 10
Sum of numbers to 10 is 55
>>> |
```

Ln: 7 Col: 0

Program2: using this list **[5, 10, 15, 20, 25, 50, 0]**. Write a program to find the index of the value 20 in the list. Then add this index value to the list.

- Expected run of this program looks like the following:

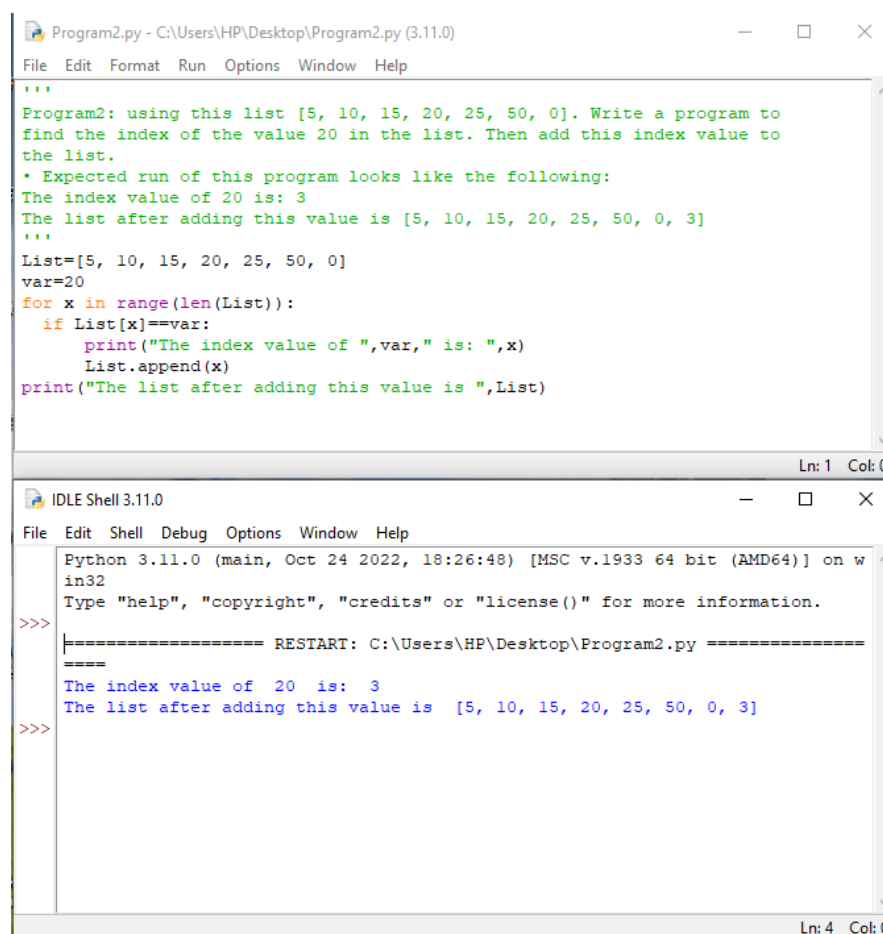
The index value of 20 is: 3

The list after adding this value is [5, 10, 15, 20, 25, 50, 0, 3]

The Code:

```
'''
Program2: using this list [5, 10, 15, 20, 25, 50, 0]. Write a program to
find the index of the value 20 in the list. Then add this index value to
the list.
• Expected run of this program looks like the following:
The index value of 20 is: 3
The list after adding this value is [5, 10, 15, 20, 25, 50, 0, 3]
'''
List=[5, 10, 15, 20, 25, 50, 0]
var=20
for x in range(len(List)):
    if List[x]==var:
        print("The index value of ",var," is: ",x)
        List.append(x)
print("The list after adding this value is ",List)
```

The Output



The screenshot displays the Python IDLE environment. The top window, titled 'Program2.py - C:\Users\HP\Desktop\Program2.py (3.11.0)', contains the Python code. The bottom window, titled 'IDLE Shell 3.11.0', shows the execution output. The output includes the program's description, the expected results, and the actual execution results: the index of 20 is 3, and the list after adding this index is [5, 10, 15, 20, 25, 50, 0, 3].

```
Program2.py - C:\Users\HP\Desktop\Program2.py (3.11.0)
File Edit Format Run Options Window Help
'''
Program2: using this list [5, 10, 15, 20, 25, 50, 0]. Write a program to
find the index of the value 20 in the list. Then add this index value to
the list.
• Expected run of this program looks like the following:
The index value of 20 is: 3
The list after adding this value is [5, 10, 15, 20, 25, 50, 0, 3]
'''
List=[5, 10, 15, 20, 25, 50, 0]
var=20
for x in range(len(List)):
    if List[x]==var:
        print("The index value of ",var," is: ",x)
        List.append(x)
print("The list after adding this value is ",List)
Ln: 1 Col: 0

IDLE Shell 3.11.0
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on w
in32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\HP\Desktop\Program2.py =====
=====
The index value of 20 is: 3
The list after adding this value is [5, 10, 15, 20, 25, 50, 0, 3]
>>>
Ln: 4 Col: 0
```

