

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

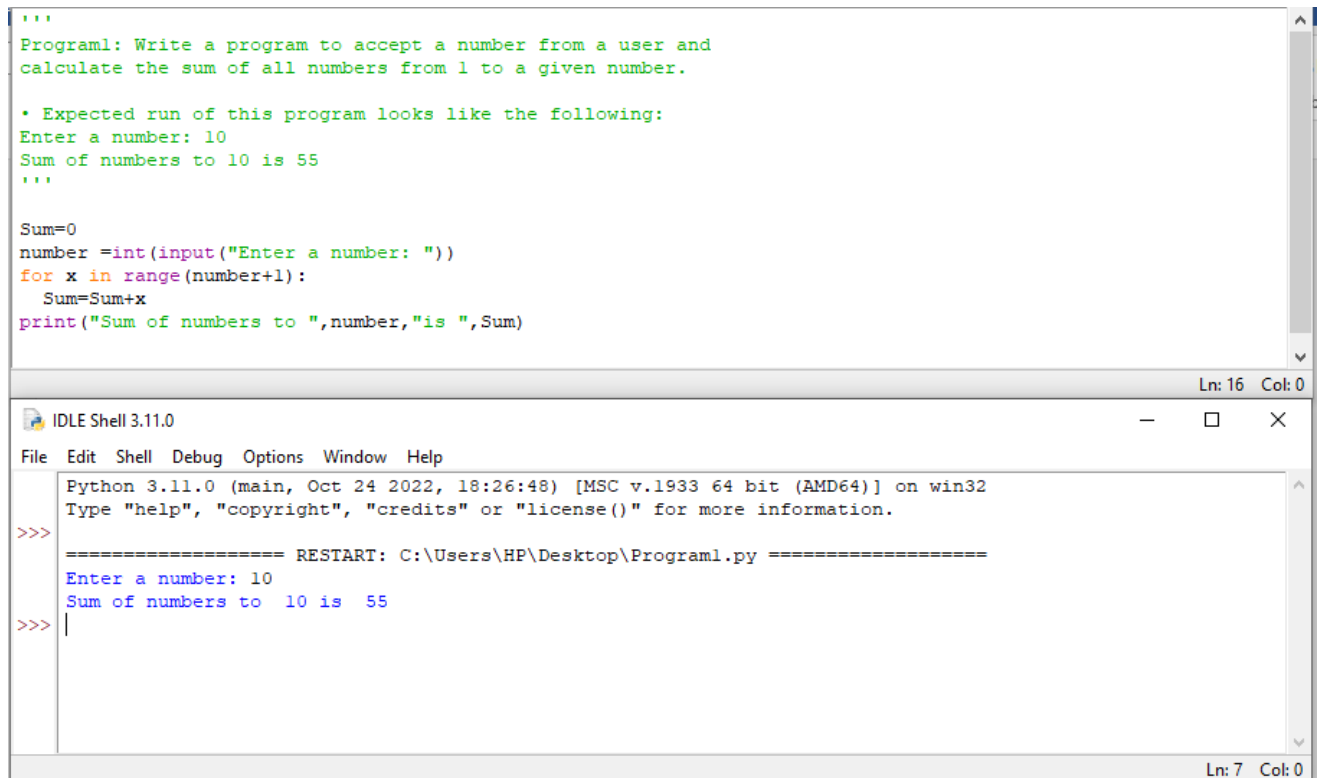
The Code

```
'''
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:



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

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Ln: 16 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 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:

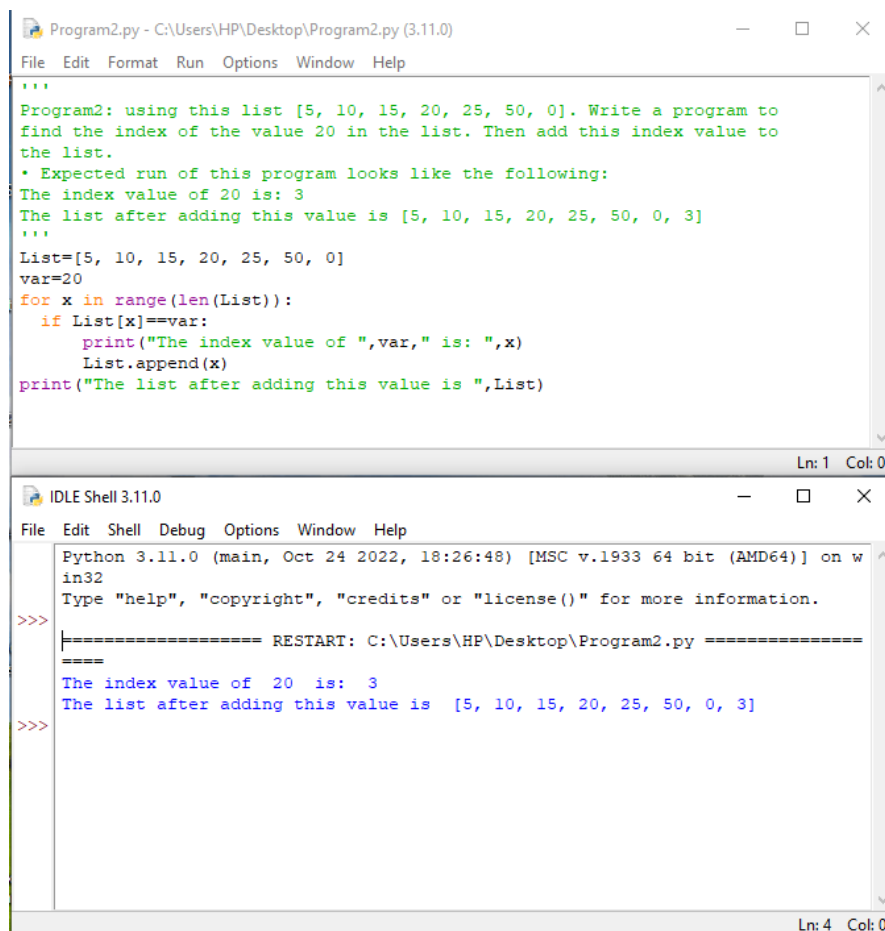
The index value of 20 is: 3

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].

```
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]
>>>
```

