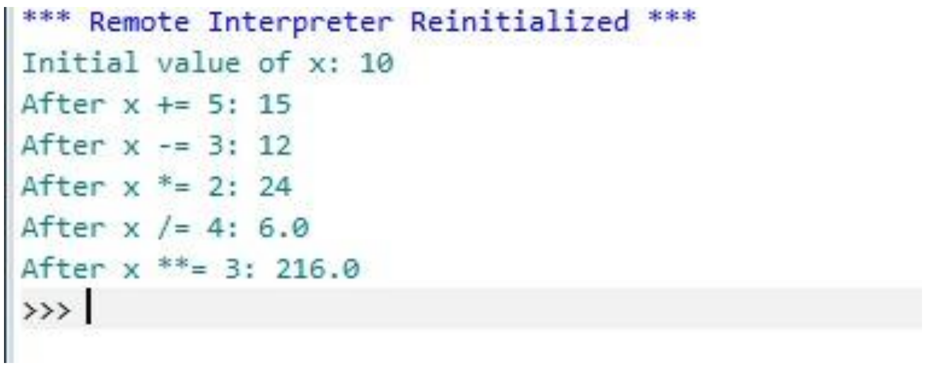
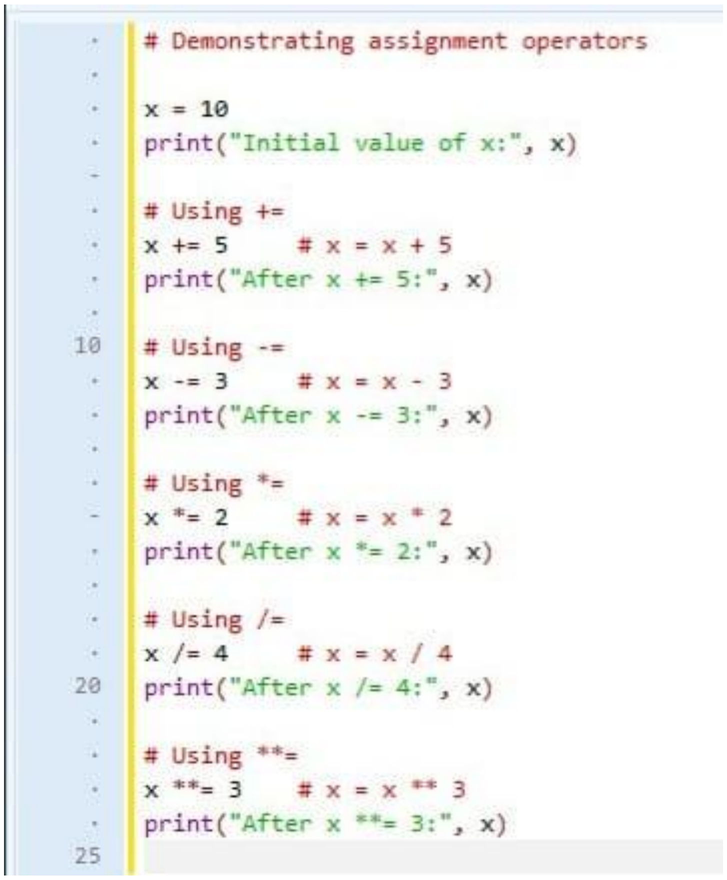
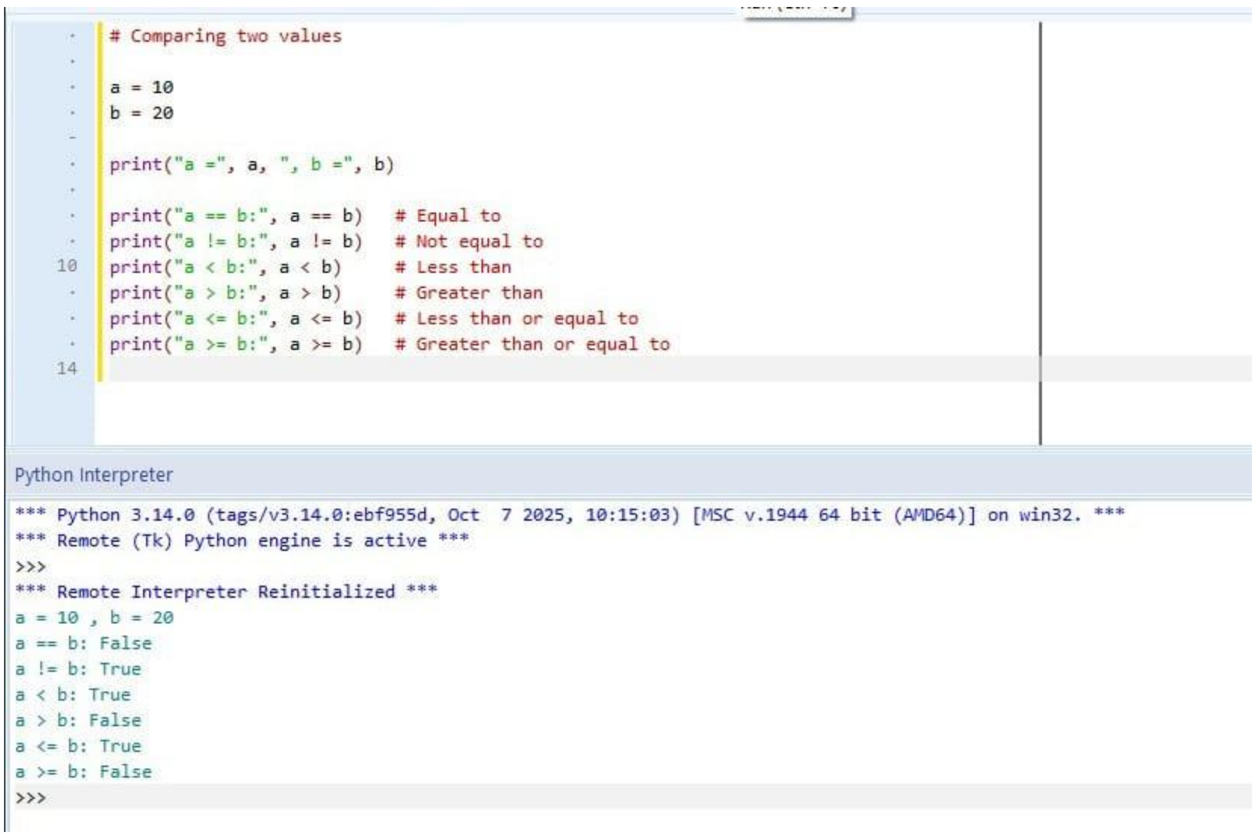

```
*** Remote Interpreter Reinitialized ***
Initial value of x: 10
After x += 5: 15
After x -= 3: 12
After x *= 2: 24
After x /= 4: 6.0
After x **= 3: 216.0
>>>
```

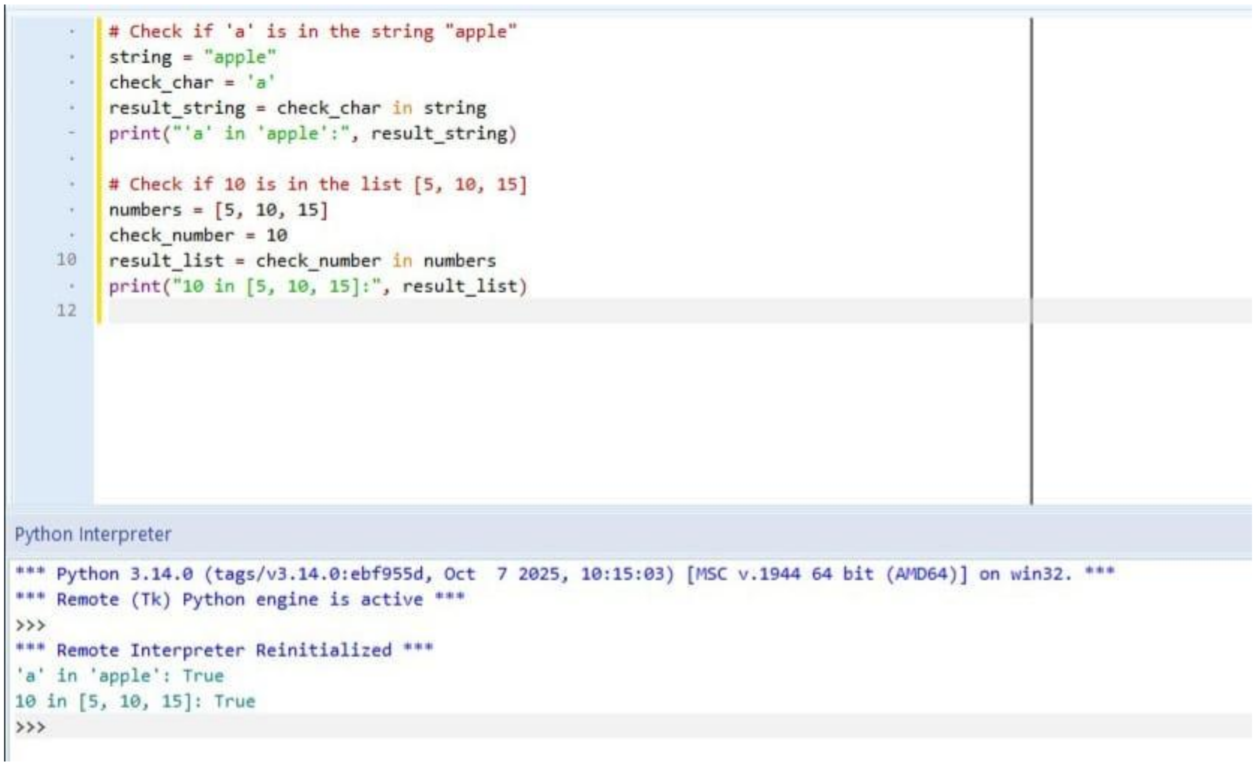

```python
# Demonstrating assignment operators

x = 10
print("Initial value of x:", x)

# Using +=
x += 5     # x = x + 5
print("After x += 5:", x)

# Using -=
x -= 3     # x = x - 3
print("After x -= 3:", x)

# Using *=
x *= 2     # x = x * 2
print("After x *= 2:", x)

# Using /=
x /= 4     # x = x / 4
print("After x /= 4:", x)

# Using **=
x **= 3    # x = x ** 3
print("After x **= 3:", x)
```



```python
# Comparing two values

a = 10
b = 20

print("a =", a, ", b =", b)

print("a == b:", a == b)   # Equal to
print("a != b:", a != b)   # Not equal to
print("a < b:", a < b)     # Less than
print("a > b:", a > b)     # Greater than
print("a <= b:", a <= b)   # Less than or equal to
print("a >= b:", a >= b)   # Greater than or equal to
```

Python Interpreter

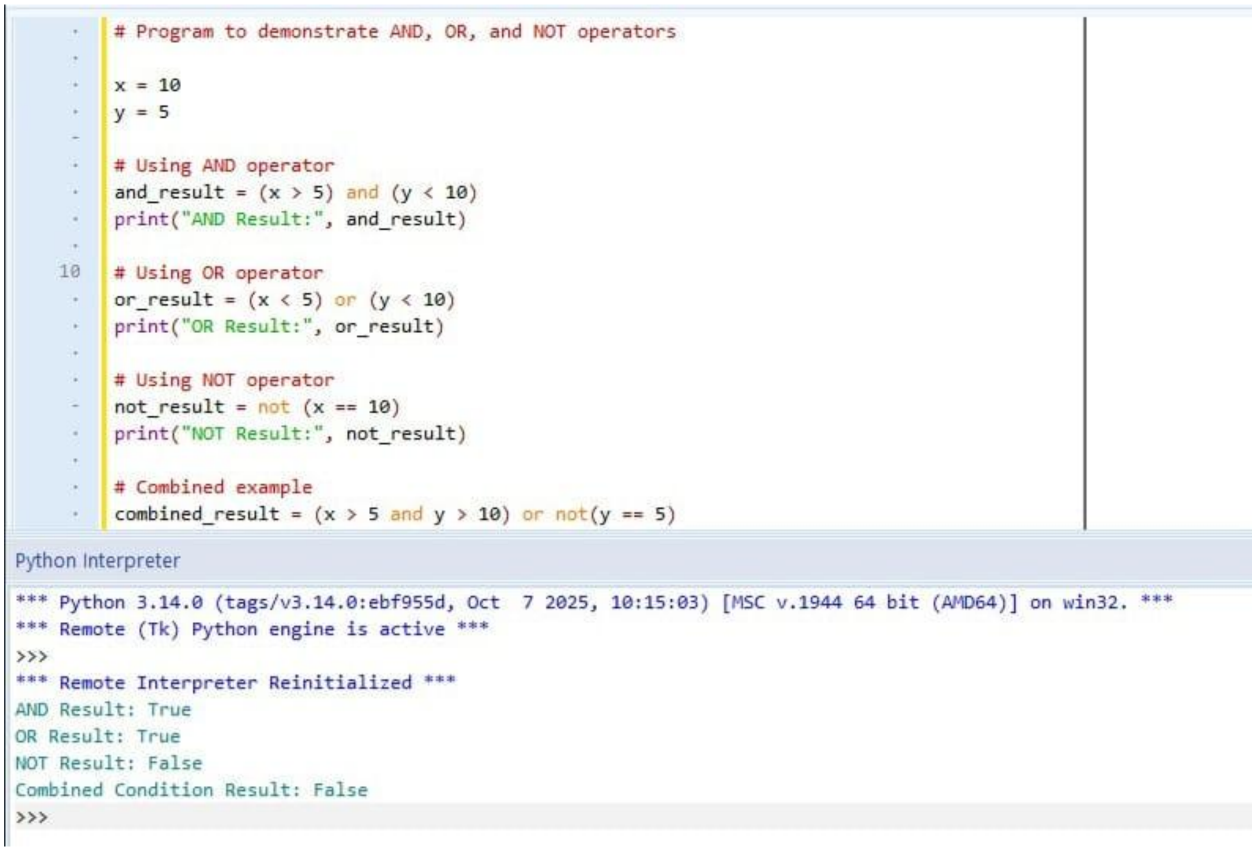
```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
a = 10 , b = 20
a == b: False
a != b: True
a < b: True
a > b: False
a <= b: True
a >= b: False
>>>
```



```python
# Check if 'a' is in the string "apple"
string = "apple"
check_char = 'a'
result_string = check_char in string
print("'a' in 'apple':", result_string)

# Check if 10 is in the list [5, 10, 15]
numbers = [5, 10, 15]
check_number = 10
result_list = check_number in numbers
print("10 in [5, 10, 15]:", result_list)
```

Python Interpreter

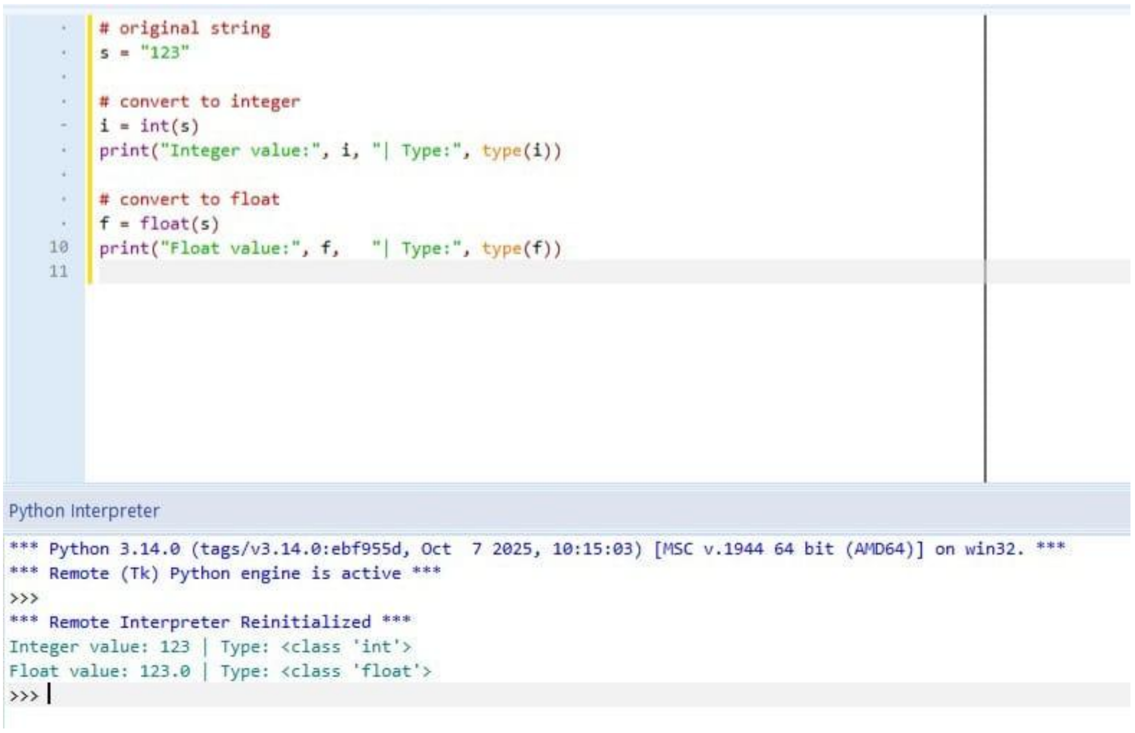
```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
'a' in 'apple': True
10 in [5, 10, 15]: True
>>>
```



```python
# Program to demonstrate AND, OR, and NOT operators

x = 10
y = 5

# Using AND operator
and_result = (x > 5) and (y < 10)
print("AND Result:", and_result)

# Using OR operator
or_result = (x < 5) or (y < 10)
print("OR Result:", or_result)

# Using NOT operator
not_result = not (x == 10)
print("NOT Result:", not_result)

# Combined example
combined_result = (x > 5 and y > 10) or not(y == 5)
```

Python Interpreter

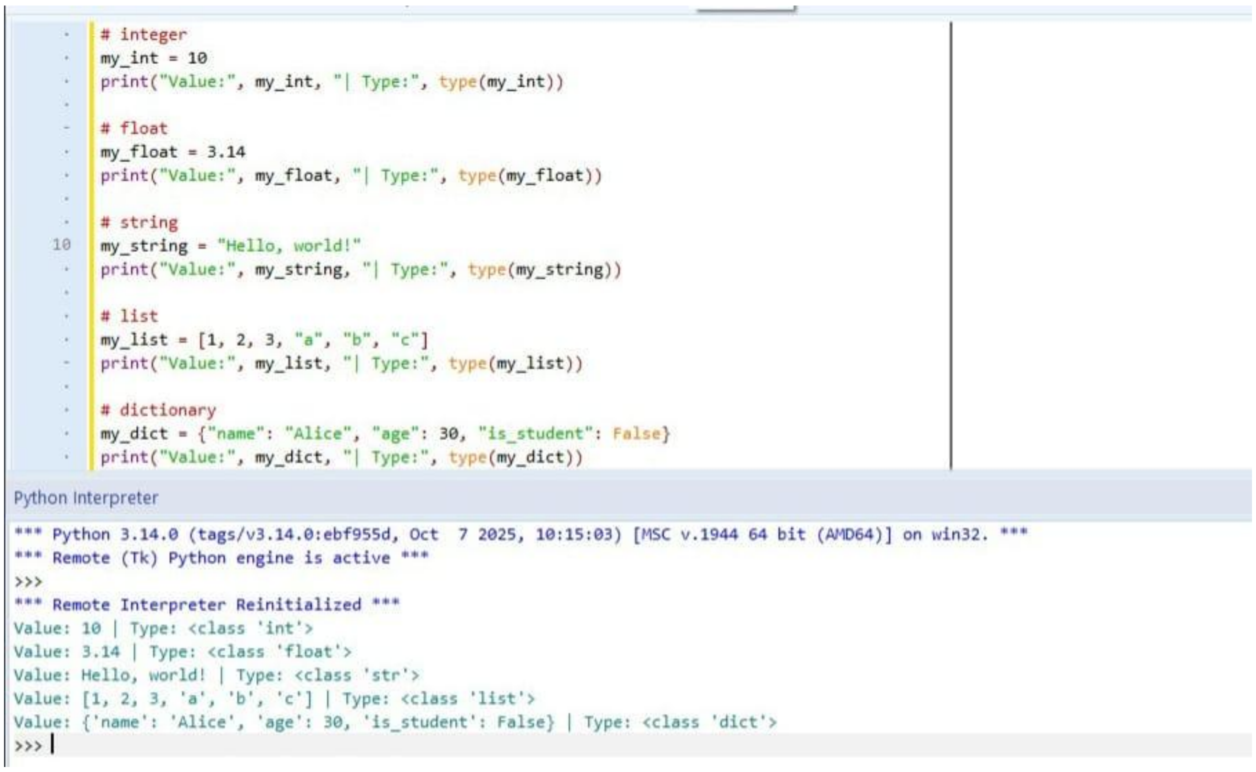
```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
AND Result: True
OR Result: True
NOT Result: False
Combined Condition Result: False
>>>
```



```python
# original string
s = "123"

# convert to integer
i = int(s)
print("Integer value:", i, "| Type:", type(i))

# convert to float
f = float(s)
print("Float value:", f,   "| Type:", type(f))

```

Python Interpreter

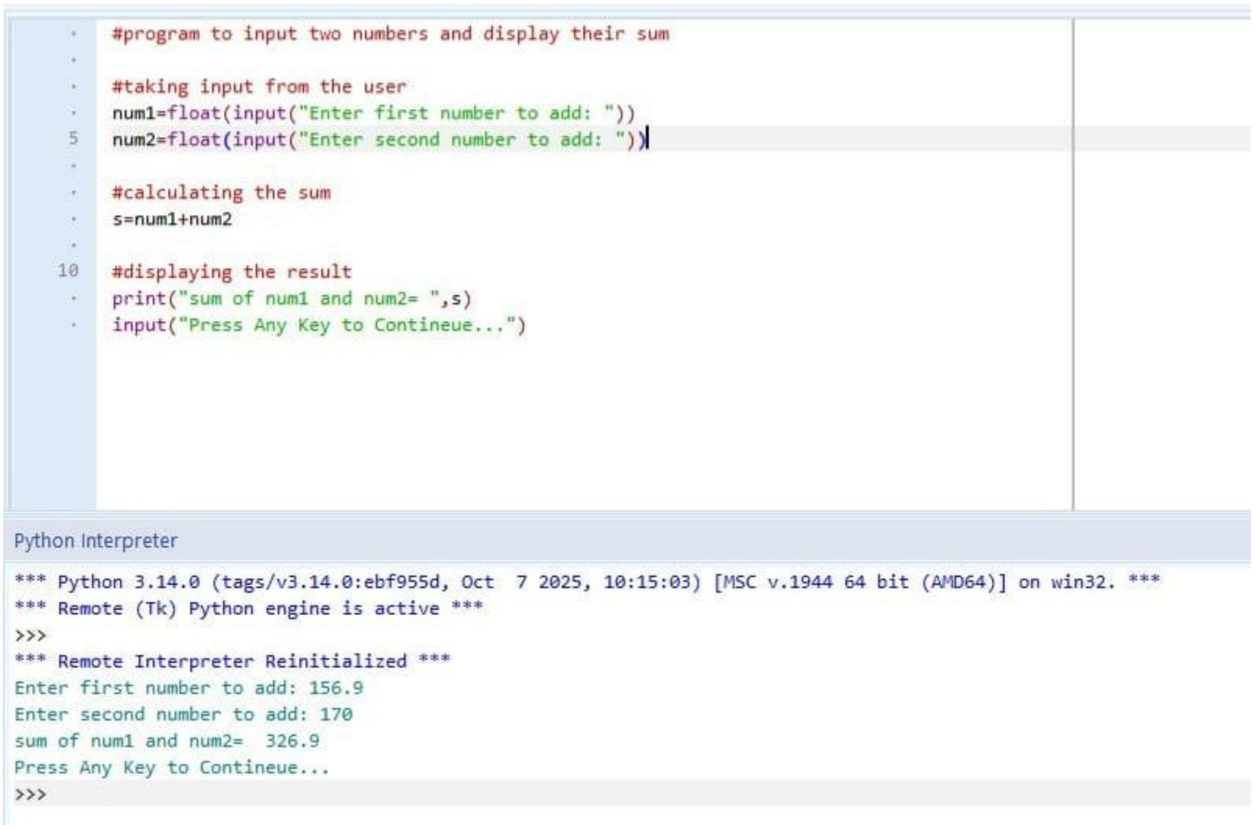
```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
Integer value: 123 | Type: <class 'int'>
Float value: 123.0 | Type: <class 'float'>
>>>
```



```python
# integer
my_int = 10
print("Value:", my_int, "| Type:", type(my_int))

# float
my_float = 3.14
print("Value:", my_float, "| Type:", type(my_float))

# string
my_string = "Hello, world!"
print("Value:", my_string, "| Type:", type(my_string))

# list
my_list = [1, 2, 3, "a", "b", "c"]
print("Value:", my_list, "| Type:", type(my_list))

# dictionary
my_dict = {"name": "Alice", "age": 30, "is_student": False}
print("Value:", my_dict, "| Type:", type(my_dict))
```

Python Interpreter

```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
Value: 10 | Type: <class 'int'>
Value: 3.14 | Type: <class 'float'>
Value: Hello, world! | Type: <class 'str'>
Value: [1, 2, 3, 'a', 'b', 'c'] | Type: <class 'list'>
Value: {'name': 'Alice', 'age': 30, 'is_student': False} | Type: <class 'dict'>
>>>
```



```python
#program to input two numbers and display their sum

#taking input from the user
num1=float(input("Enter first number to add: "))
num2=float(input("Enter second number to add: "))

#calculating the sum
s=num1+num2

#displaying the result
print("sum of num1 and num2= ",s)
input("Press Any Key to Contineue...")
```

Python Interpreter

```
*** Python 3.14.0 (tags/v3.14.0:ebf955d, Oct  7 2025, 10:15:03) [MSC v.1944 64 bit (AMD64)] on win32. ***
*** Remote (Tk) Python engine is active ***
>>>
*** Remote Interpreter Reinitialized ***
Enter first number to add: 156.9
Enter second number to add: 170
sum of num1 and num2=  326.9
Press Any Key to Contineue...
>>>
```