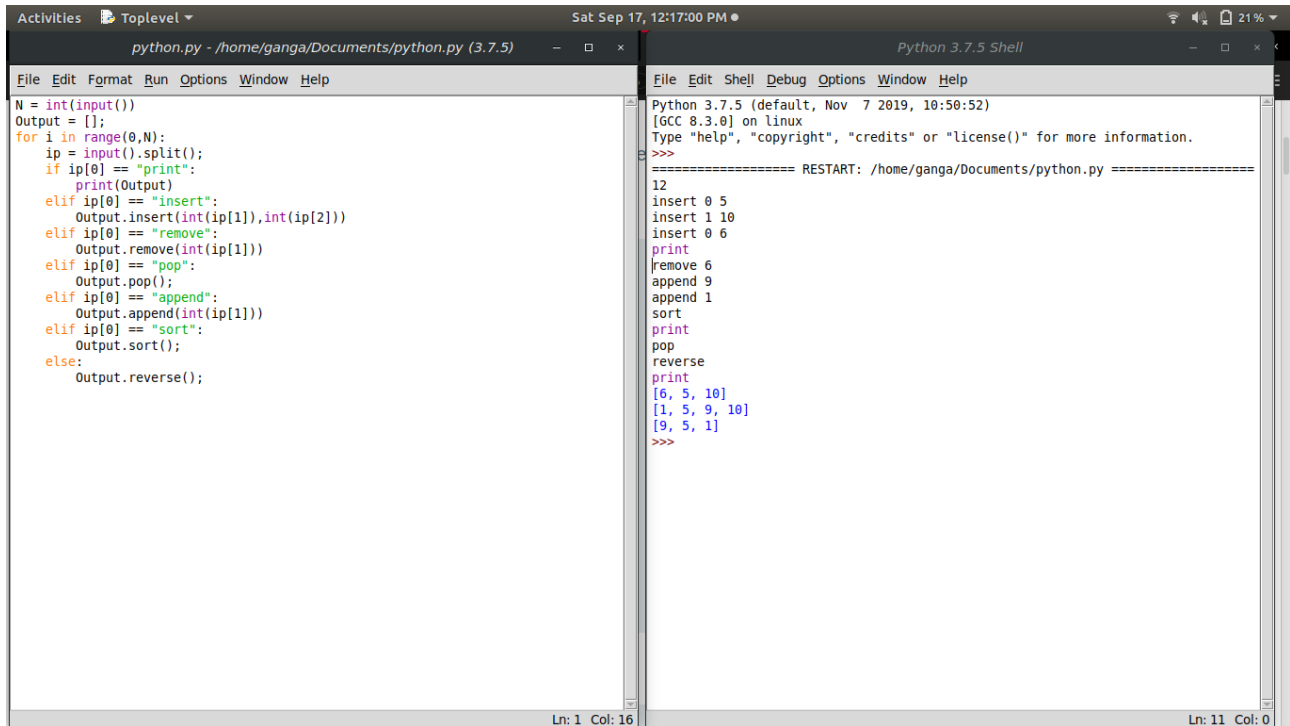


Assignment 1

List



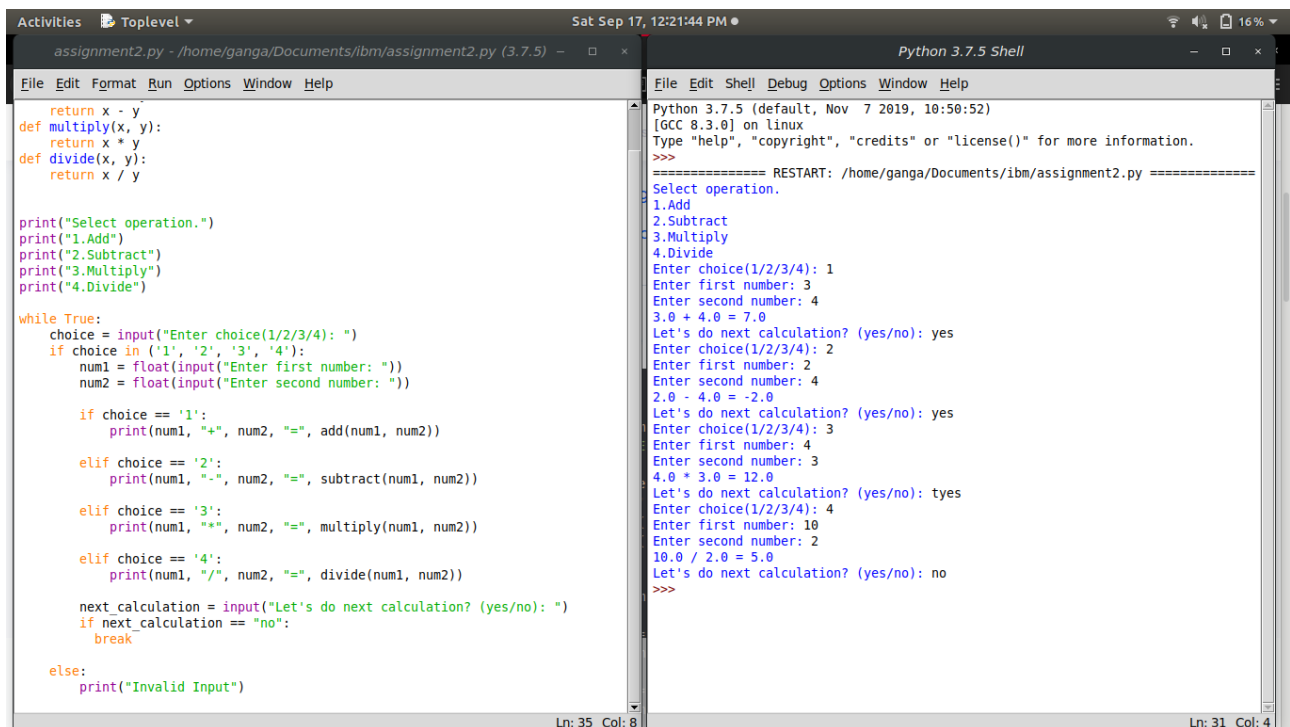
The screenshot shows a Python IDE with two windows. The left window, titled 'python.py - /home/ganga/Documents/python.py (3.7.5)', contains the following code:

```
N = int(input())
Output = []
for i in range(0,N):
    ip = input().split();
    if ip[0] == "print":
        print(Output)
    elif ip[0] == "insert":
        Output.insert(int(ip[1]),int(ip[2]))
    elif ip[0] == "remove":
        Output.remove(int(ip[1]))
    elif ip[0] == "pop":
        Output.pop();
    elif ip[0] == "append":
        Output.append(int(ip[1]))
    elif ip[0] == "sort":
        Output.sort();
    else:
        Output.reverse();
```

The right window, titled 'Python 3.7.5 Shell', shows the execution output:

```
Python 3.7.5 (default, Nov 7 2019, 10:50:52)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /home/ganga/Documents/python.py =====
12
insert 0 5
insert 1 10
insert 0 6
print
[6, 5, 10]
remove 6
append 9
append 1
sort
print
[1, 5, 9, 10]
pop
reverse
print
[9, 5, 1]
>>>
```

Calculator



The screenshot shows a Python IDE with two windows. The left window, titled 'assignment2.py - /home/ganga/Documents/ibm/assignment2.py (3.7.5)', contains the following code:

```
return x - y
def multiply(x, y):
    return x * y
def divide(x, y):
    return x / y

print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:
    choice = input("Enter choice(1/2/3/4): ")
    if choice in ('1', '2', '3', '4'):
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))

        if choice == '1':
            print(num1, "+", num2, "=", add(num1, num2))

        elif choice == '2':
            print(num1, "-", num2, "=", subtract(num1, num2))

        elif choice == '3':
            print(num1, "*", num2, "=", multiply(num1, num2))

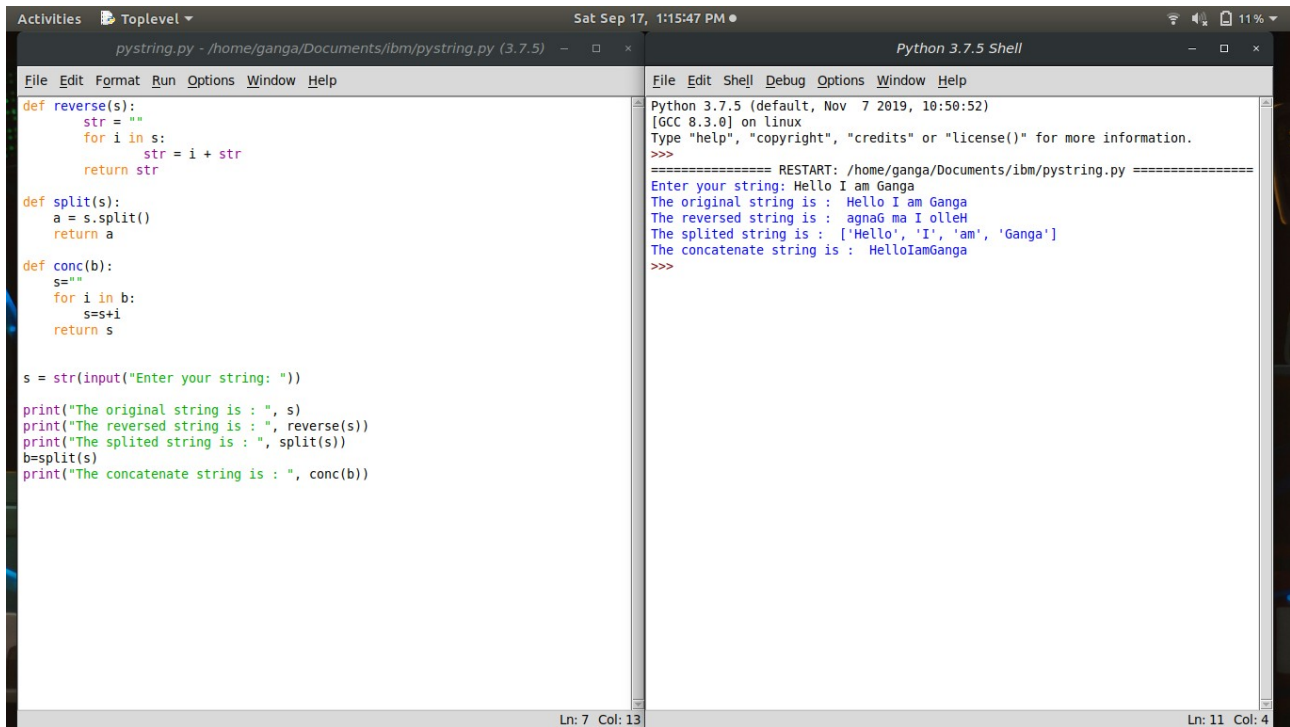
        elif choice == '4':
            print(num1, "/", num2, "=", divide(num1, num2))

        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
            break
    else:
        print("Invalid Input")
```

The right window, titled 'Python 3.7.5 Shell', shows the execution output:

```
Python 3.7.5 (default, Nov 7 2019, 10:50:52)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /home/ganga/Documents/ibm/assignment2.py =====
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice(1/2/3/4): 1
Enter first number: 3
Enter second number: 4
3.0 + 4.0 = 7.0
Let's do next calculation? (yes/no): yes
Enter choice(1/2/3/4): 2
Enter first number: 2
Enter second number: 4
2.0 - 4.0 = -2.0
Let's do next calculation? (yes/no): yes
Enter choice(1/2/3/4): 3
Enter first number: 4
Enter second number: 3
4.0 * 3.0 = 12.0
Let's do next calculation? (yes/no): tyas
Enter choice(1/2/3/4): 4
Enter first number: 10
Enter second number: 2
10.0 / 2.0 = 5.0
Let's do next calculation? (yes/no): no
>>>
```

String



The image shows a screenshot of a Python IDE with two panes. The left pane displays a Python script named `pystring.py` with functions for reversing, splitting, and concatenating strings. The right pane shows the output of the script after execution, including the input string and the results of each operation.

```
def reverse(s):
    str = ""
    for i in s:
        str = i + str
    return str

def split(s):
    a = s.split()
    return a

def conc(b):
    s=""
    for i in b:
        s=s+i
    return s

s = str(input("Enter your string: "))
print("The original string is : ", s)
print("The reversed string is : ", reverse(s))
print("The splited string is : ", split(s))
b=split(s)
print("The concatenate string is : ", conc(b))
```

Python 3.7.5 (default, Nov 7 2019, 10:50:52)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /home/ganga/Documents/ibm/pystring.py =====
Enter your string: Hello I am Ganga
The original string is : Hello I am Ganga
The reversed string is : agnaG ma I olleH
The splited string is : ['Hello', 'I', 'am', 'Ganga']
The concatenate string is : HelloIamGanga
>>>