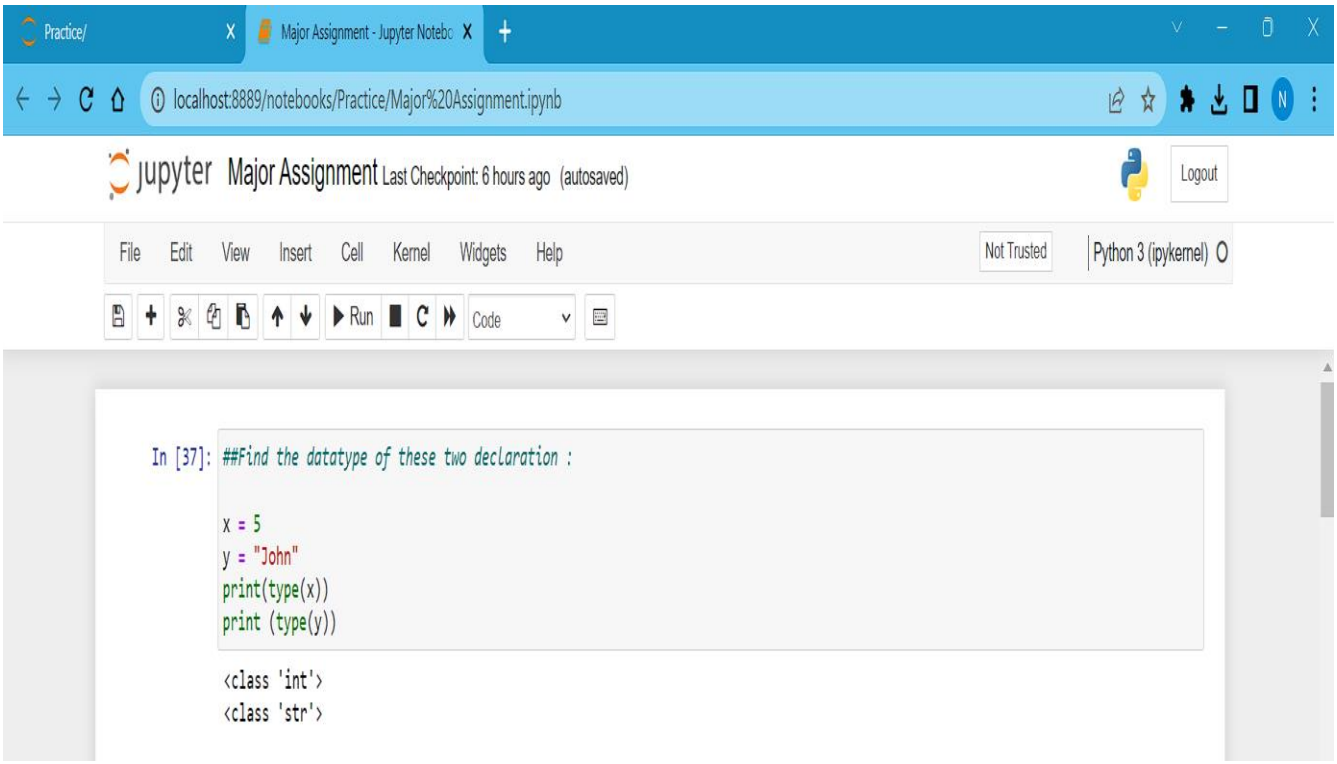
1. **Find the datatype of these two declarations:**

a. x = 5

b. y = "John

- print(type(X))
- print(type(y))

Screenshot:



---

2. **Check whether the following syntax is valid or invalid for naming a variable :**

a. 3a=10 # invalid
b. @abc=10 # invalid
c. a100=100 # valid
d. _a984_= 100 # valid
e. a9967$=100 # invalid
f. xyz-2=100 # invalid

3. Check if an element exists in the list in Python :

list = test_list = [1, 6, 3, 5, 3, 4]

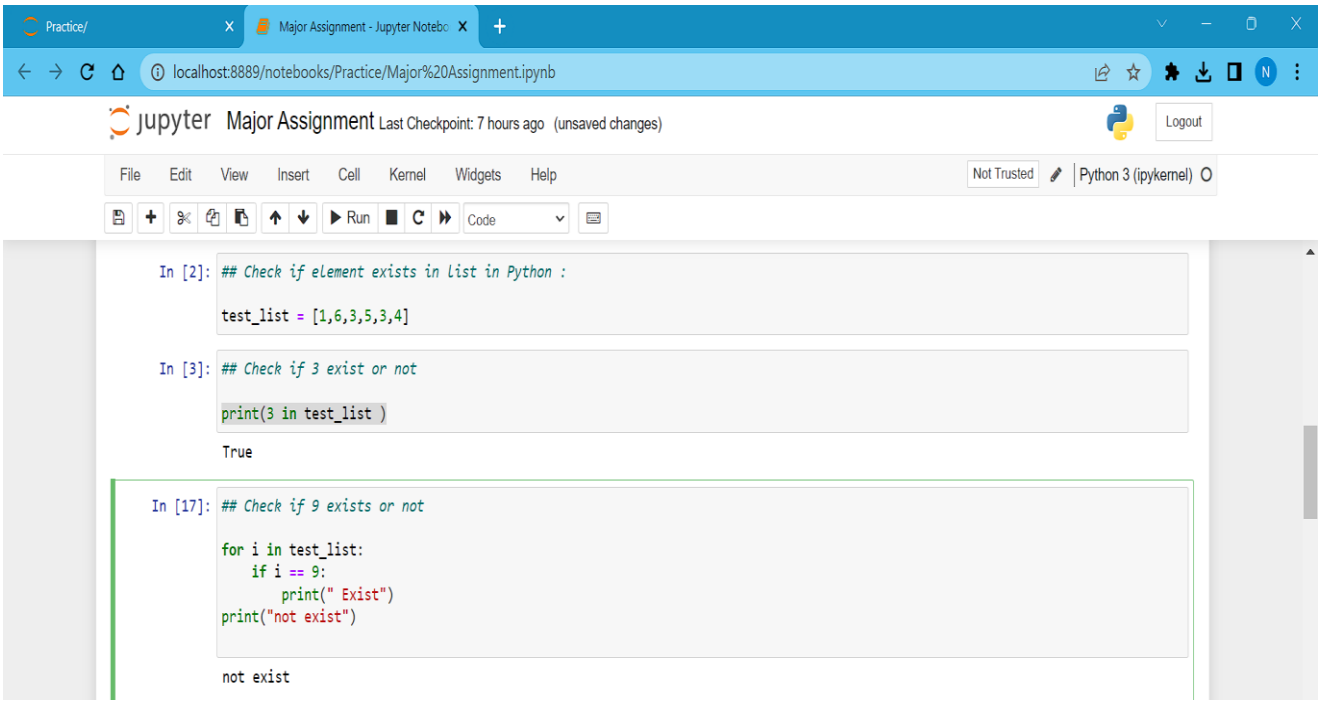
a. Check if 3 exist or not.

- print(3 in test_list)

b. Check if 9 exists or not.

- for i in test_list:
    if i == 9:
        print(" Exist")
  print("not exist")

Screenshot:

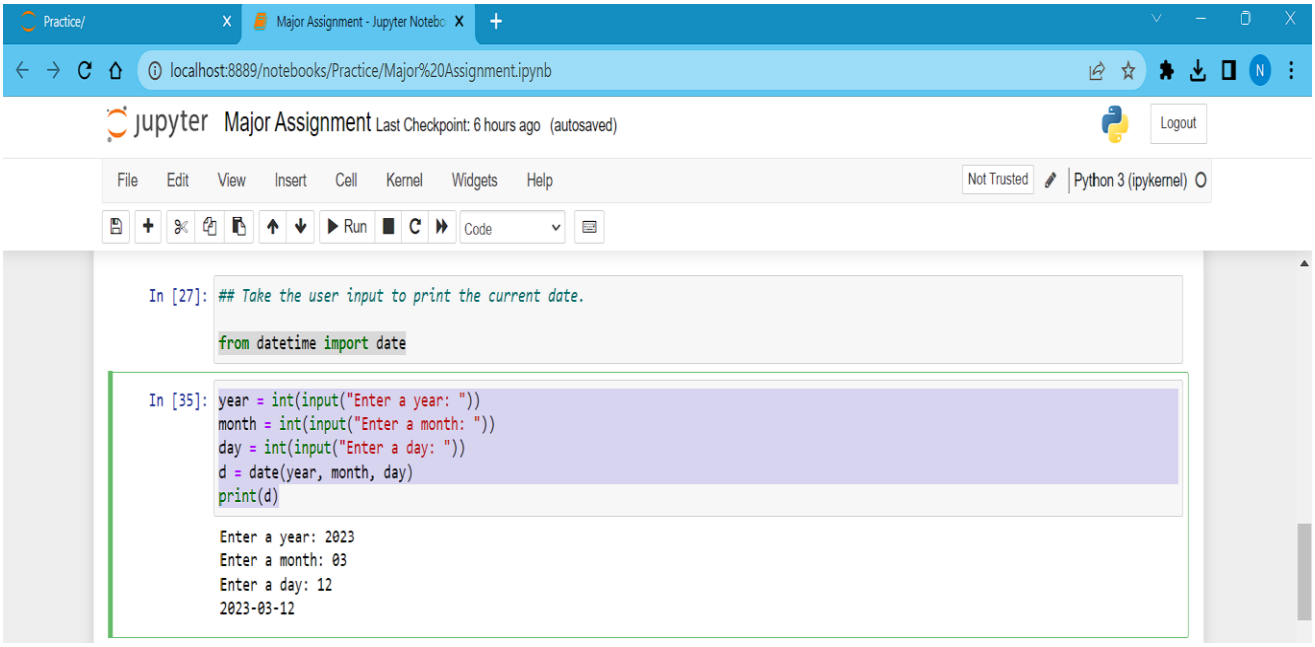


---

4. Take the user input to print the current date.

- from datetime import date
  year = int(input("Enter a year: "))
  month = int(input("Enter a month: "))
  day = int(input("Enter a day: "))
  d = date(year, month, day)
  print(d)

Screenshot:



5. What is the output of the following code :

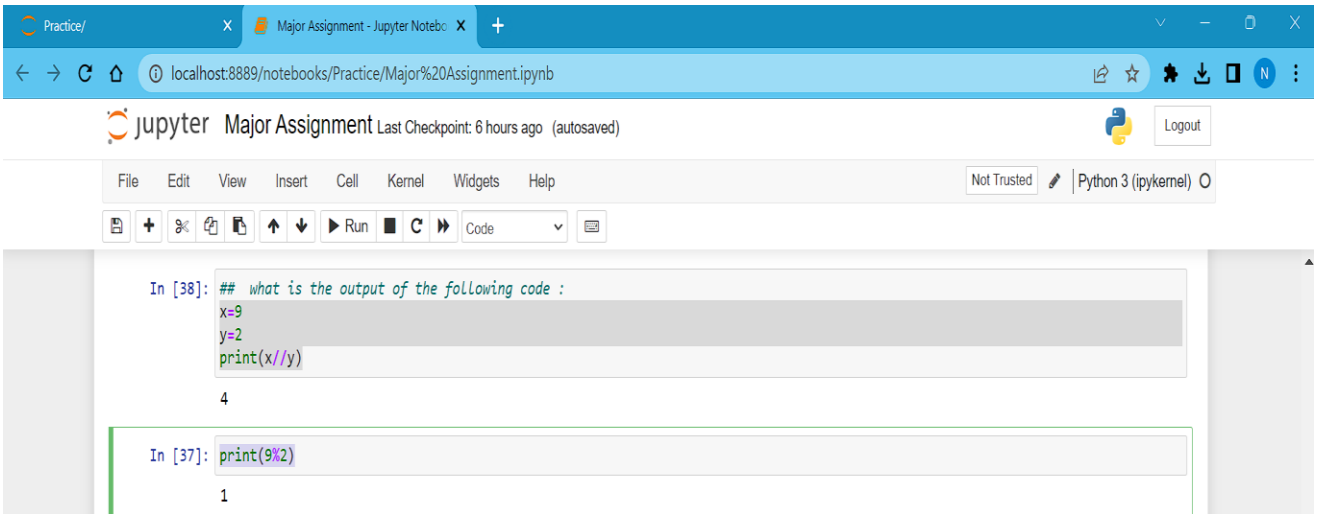
a. print 9//2

- x=9
  y=2
  print(x//y)

c. print 9%2

- print(9%2)

Screenshot:



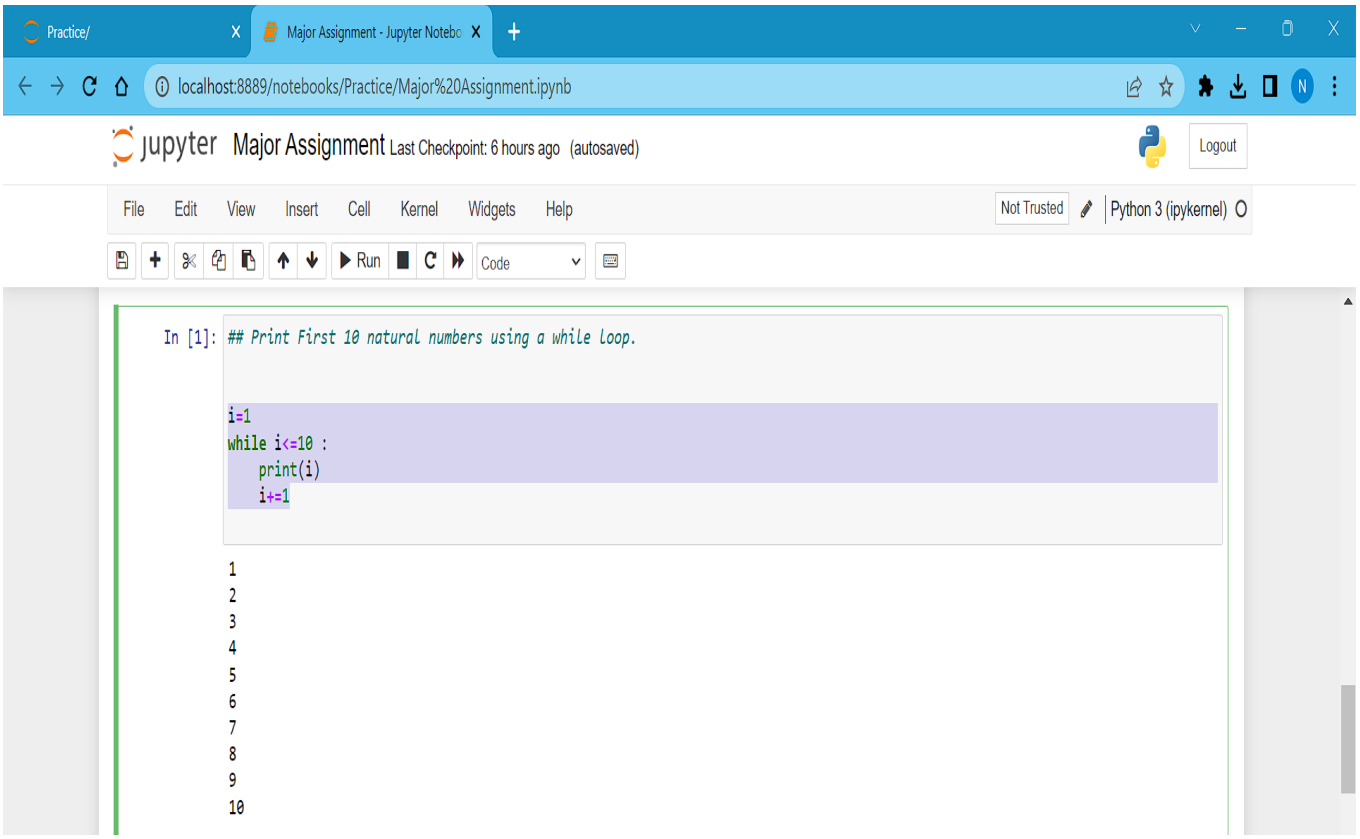
6. Print the First 10 natural numbers using a while loop

```
i=1

while i<=10 :

    print(i)
    i+=1
```

Screenshot:



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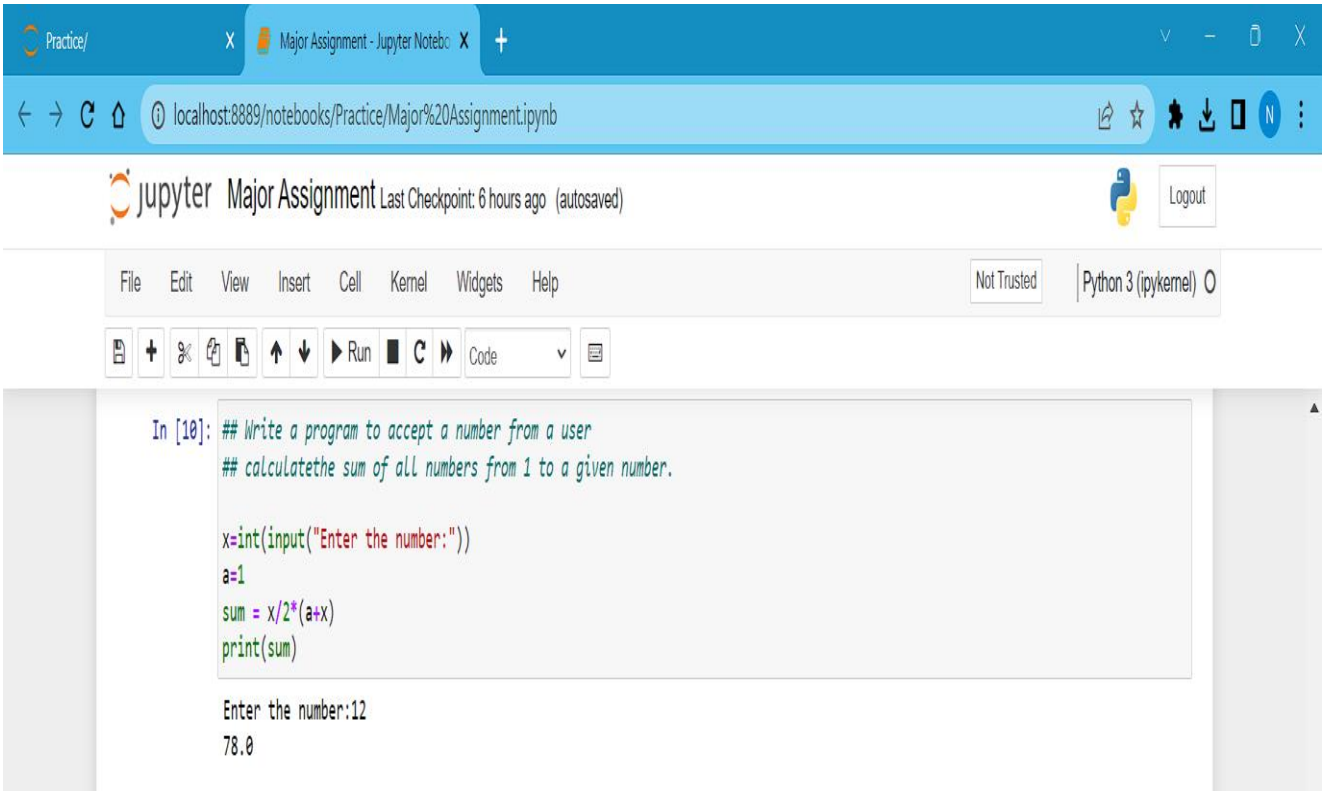
7. Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number.

```
x=int(input("Enter the number:"))
a=1
sum = x/2*(a+x)
print(sum)
```

.

Screenshot:



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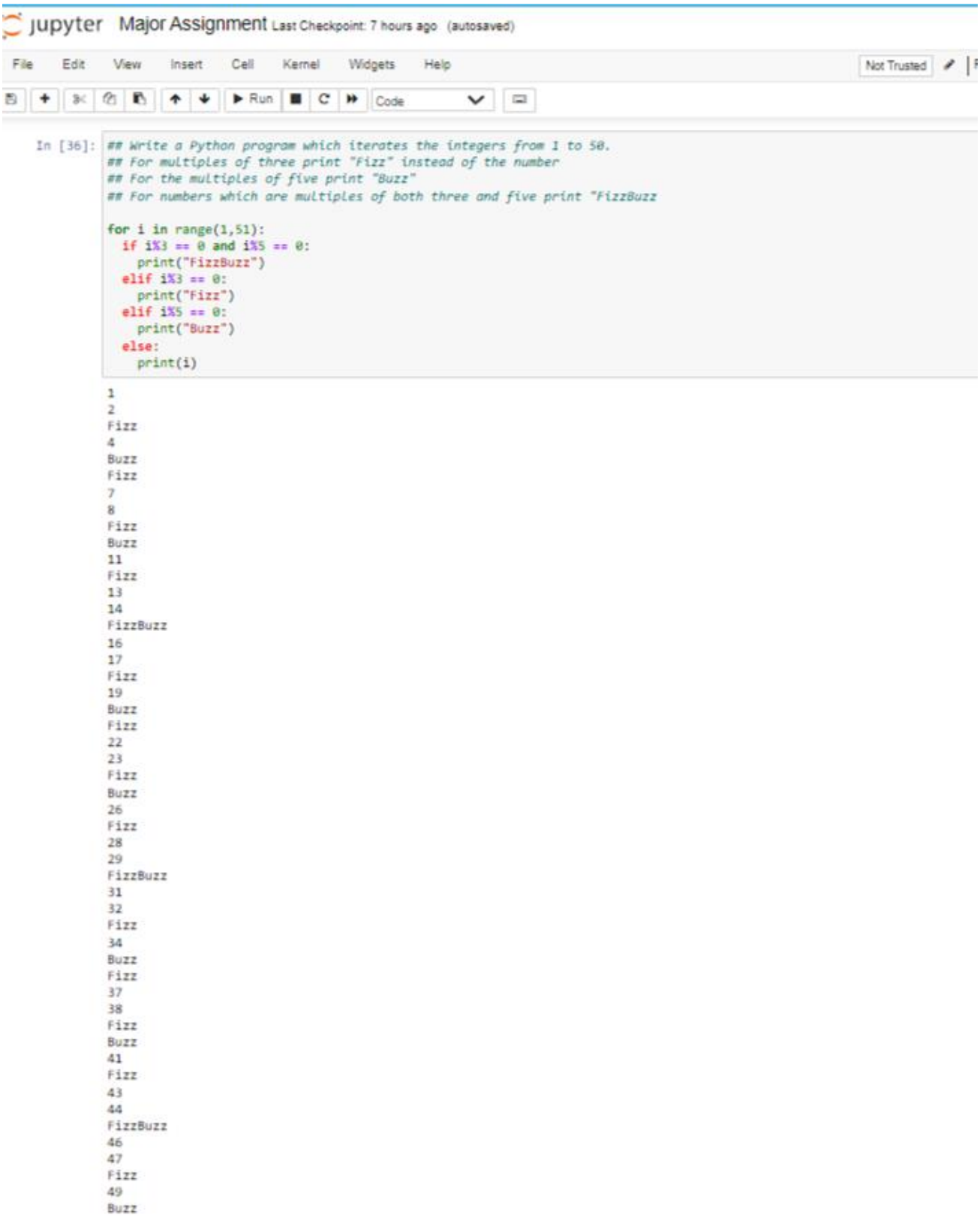
8. Write a Python program that iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for multiples of five print "Buzz". For numbers that are multiples of both three and five print "FizzBuzz".

```
for i in range(1,51):
    if i%3 == 0 and i%5 == 0:
      print("FizzBuzz")
    elif i%3 == 0:
      print("Fizz")
    elif i%5 == 0:
      print("Buzz")
    else:
      print(i)
```

Screenshot:


jupyter Major Assignment Last Checkpoint: 7 hours ago (autosaved)
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Run
Code
In [36]:
Write a Python program which iterates the integers from 1 to 50.
For multiples of three print "Fizz" instead of the number
For the multiples of five print "Buzz"
For numbers which are multiples of both three and five print "FizzBuzz
for i in range(1,51):
if i%3 == 0 and i%5 == 0:
print("FizzBuzz")
elif i%3 == 0:
print("Fizz")
elif i%5 == 0:
print("Buzz")
else:
print(i)
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
16
17
Fizz
19
Buzz
Fizz
22
23
Fizz
Buzz
26
Fizz
28
29
FizzBuzz
31
32
Fizz
34
Buzz
Fizz
37
38
Fizz
Buzz
41
Fizz
43
44
FizzBuzz
46
47
Fizz
49
Buzz