INT108

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Ques:

Project 11:

In this project, you have to enter a range [A, B] and the system will randomly pick any number from your given range and check the status of that given number.

The properties to be checked are:

1. Is that number odd or even
2. Is that number a positive or negative number
3. Is that number a prime number or a composite number?

After checking the status, you have to display all the properties followed by the randomly picked number.

For example

The range is (1,12) and the randomly picked number is 10

Then the properties followed by this number are:

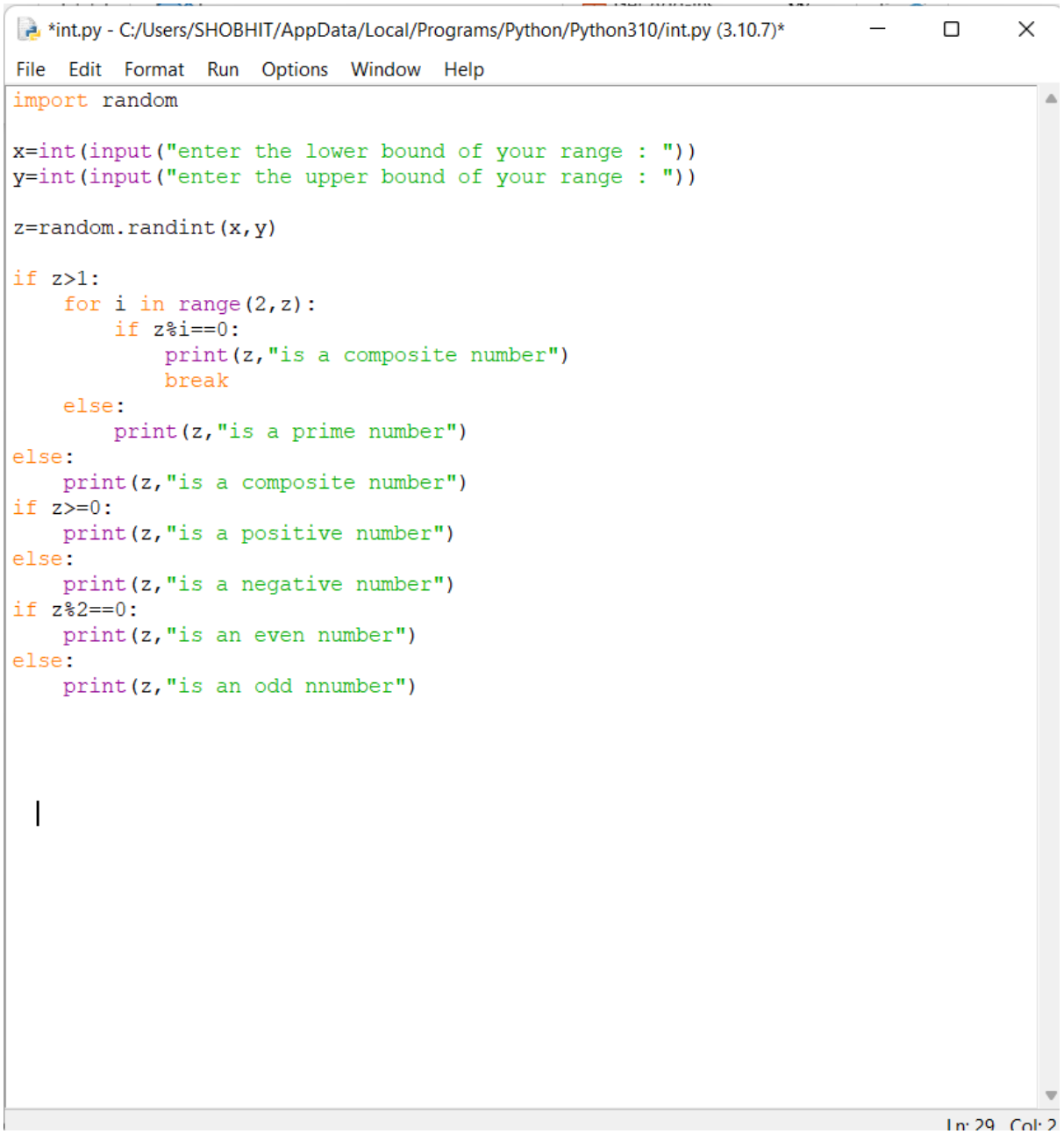
10 is a positive number

10 is an even number

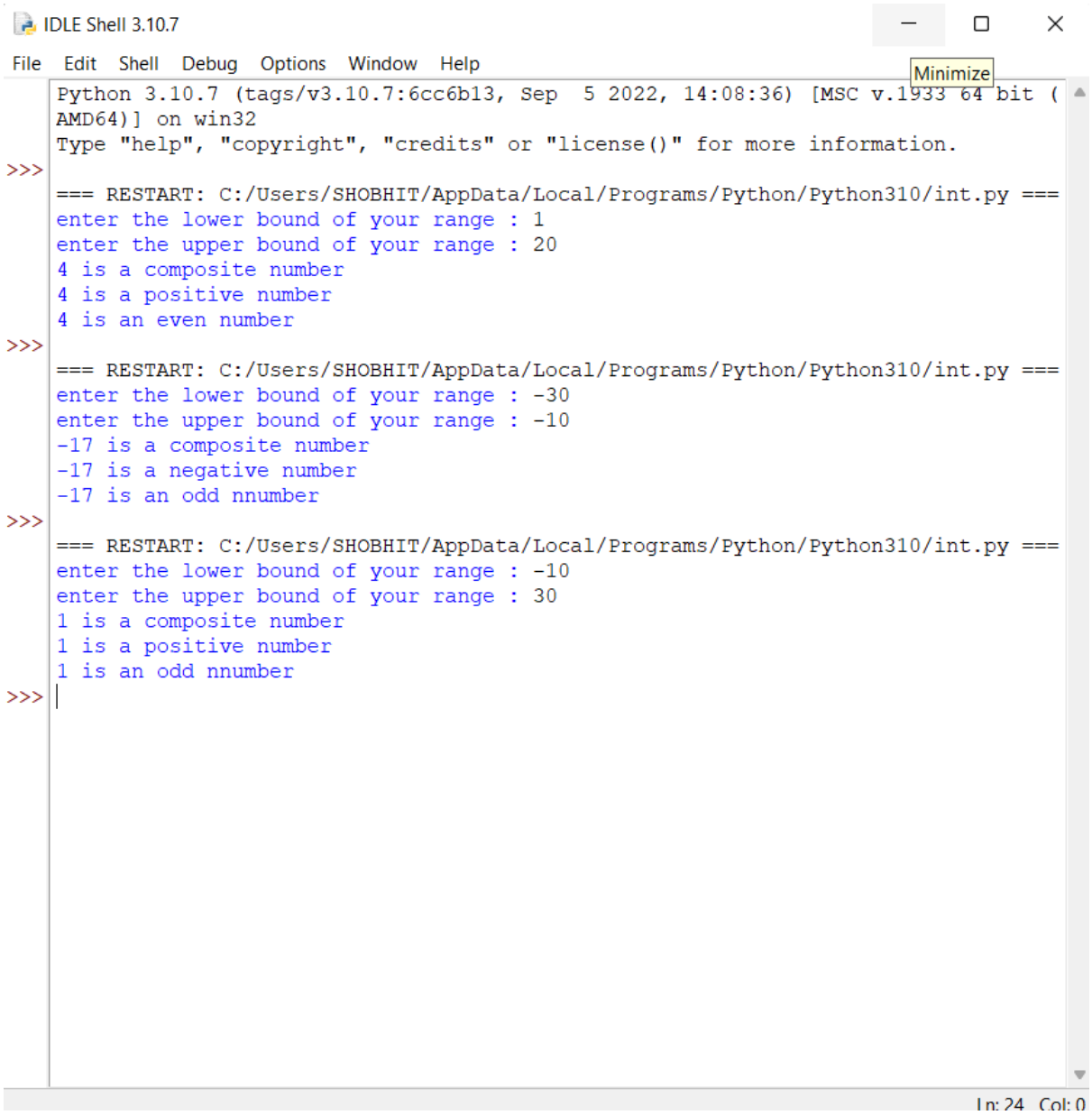
10 is a composite number

(Student is free to decide the input and output layout for this mini project)

Solution:


int.py - C:/Users/SHOBHIT/AppData/Local/Programs/Python/Python310/int.py (3.10.7)
File Edit Format Run Options Window Help
import random
x=int(input("enter the lower bound of your range : "))
y=int(input("enter the upper bound of your range : "))
z=random.randint(x,y)
if z>1:
for i in range(2,z):
if z%i==0:
print(z,"is a composite number")
break
else:
print(z,"is a prime number")
else:
print(z,"is a composite number")
if z>=0:
print(z,"is a positive number")
else:
print(z,"is a negative number")
if z%2==0:
print(z,"is an even number")
else:
print(z,"is an odd nnumber")
Ln: 29 Col: 2

Result:


IDLE Shell 3.10.7
File Edit Shell Debug Options Window Help
Minimize
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:/Users/SHOBHIT/AppData/Local/Programs/Python/Python310/int.py ===
enter the lower bound of your range : 1
enter the upper bound of your range : 20
4 is a composite number
4 is a positive number
4 is an even number
>>>
=== RESTART: C:/Users/SHOBHIT/AppData/Local/Programs/Python/Python310/int.py ===
enter the lower bound of your range : -30
enter the upper bound of your range : -10
-17 is a composite number
-17 is a negative number
-17 is an odd nnumber
>>>
=== RESTART: C:/Users/SHOBHIT/AppData/Local/Programs/Python/Python310/int.py ===
enter the lower bound of your range : -10
enter the upper bound of your range : 30
1 is a composite number
1 is a positive number
1 is an odd nnumber
>>>
Ln: 24 Col: 0