PYTHON ASSIGNMENT BOOK

MAKE A MOVE TO PYTHON

ASSIGNMENTS

TASK TWO: OPERATORS AND DECISION-MAKING STATEMENT

Submitted By

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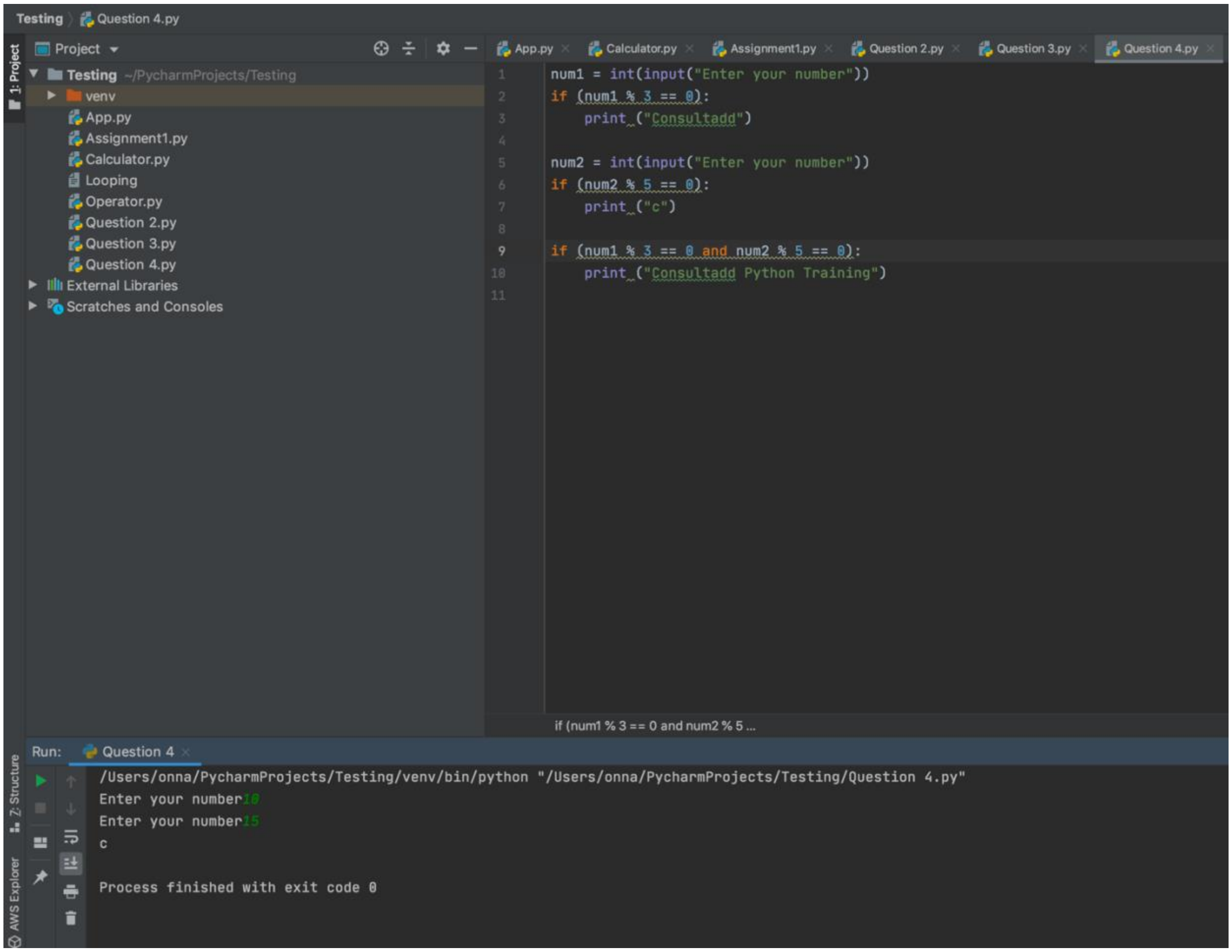
1. **Write a program in Python to perform the following operation:**

- If a number is divisible by 3 it should print “Consultadd” as a string
- If a number is divisible by 5 it should print “c” as a string
- If a number is divisible by both 3 and 5 it should print “Consultadd Python Training” as a string.



```
num1 = int(input("Enter your number"))
if (num1 % 3 == 0):
    print ("Consultadd")

num2 = int(input("Enter your number"))
if (num2 % 5 == 0):
    print ("c")

if (num1 % 3 == 0 and num2 % 5 == 0):
    print ("Consultadd Python Training")
```

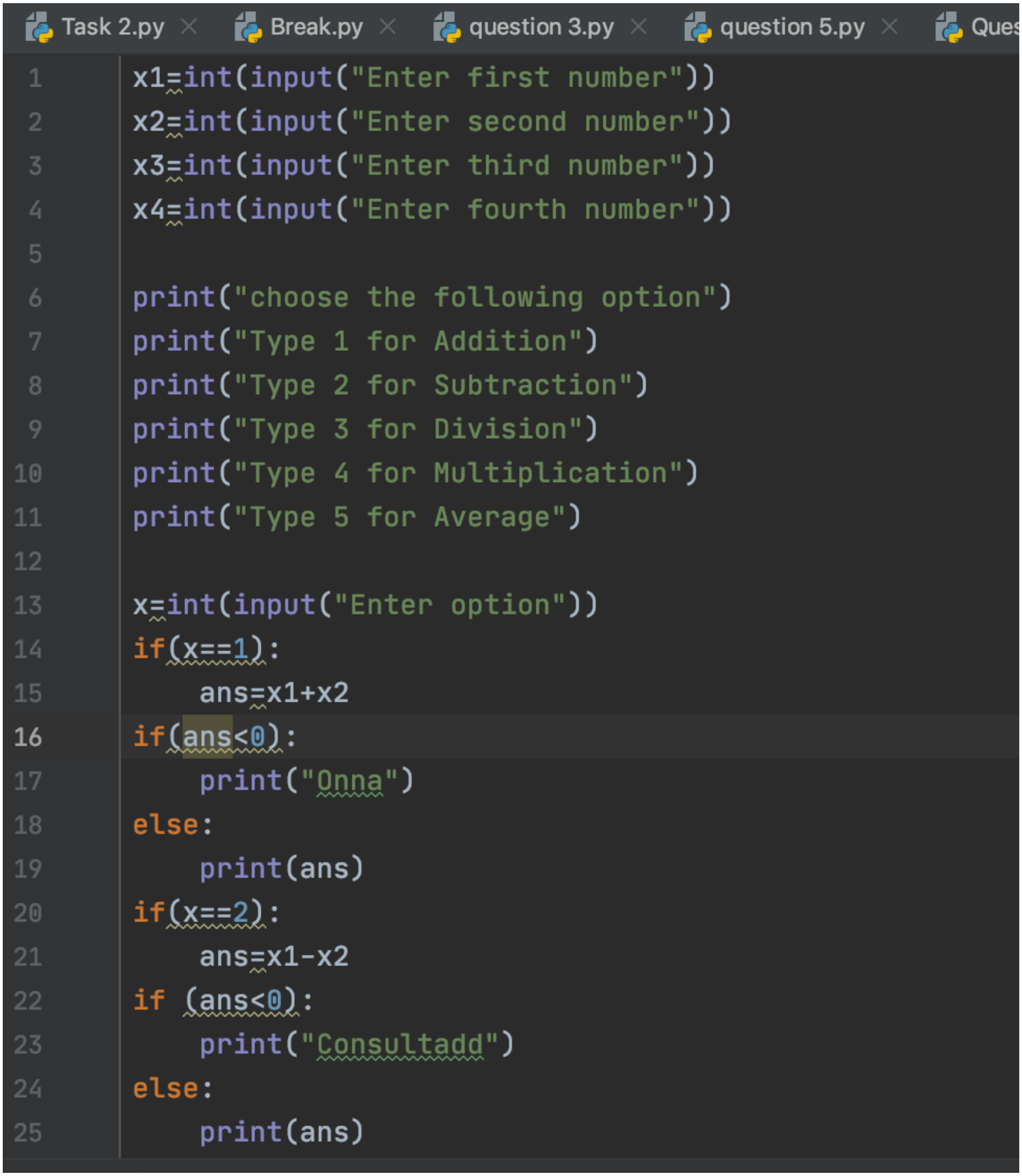
```
/Users/onna/PycharmProjects/Testing/venv/bin/python "/Users/onna/PycharmProjects/Testing/Question 4.py"
Enter your number10
Enter your number15
c

Process finished with exit code 0
```

2. Write a program in Python to perform the following operator-based task:

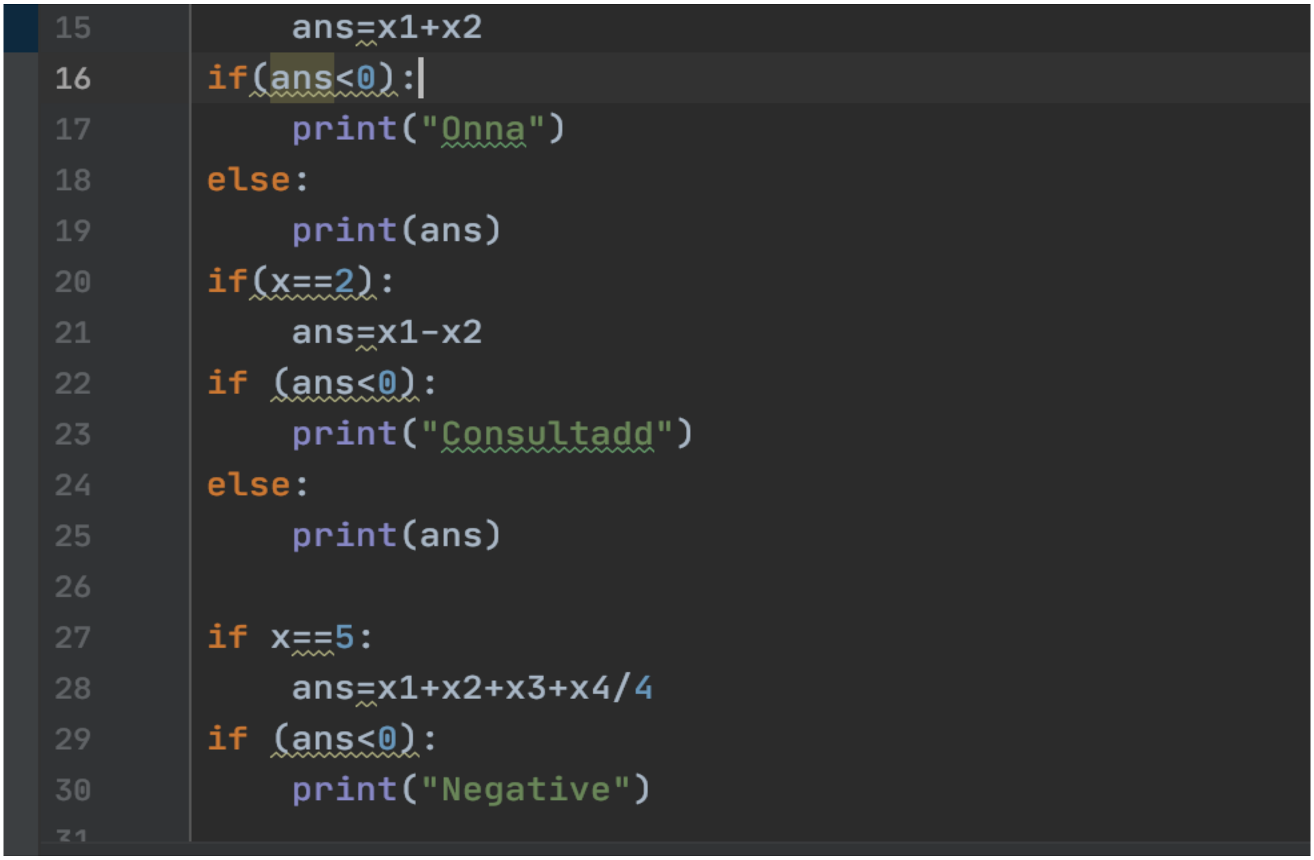
- Ask user to choose the following option first:
  - If User Enter 1 - Addition
  - If User Enter 2 –Subtraction
  - If User Enter 3 – Division
  - If User Enter 4 – Multiplication
  - If User Enter 5 – Average

- Ask user to enter the 2 numbers in a variable for first and second for the first 4 options mentioned above.
- Ask user to enter two more numbers as first and second2 for calculating the average as soon as user choose an option 5.

- At the end if the answer of any operation is Negative print a statement saying "NEGATIVE"
- NOTE: At a time, user can perform one action at a time.



```python
x1=int(input("Enter first number"))
x2=int(input("Enter second number"))
x3=int(input("Enter third number"))
x4=int(input("Enter fourth number"))

print("choose the following option")
print("Type 1 for Addition")
print("Type 2 for Subtraction")
print("Type 3 for Division")
print("Type 4 for Multiplication")
print("Type 5 for Average")

x=int(input("Enter option"))
if(x==1):
    ans=x1+x2
if(ans<0):
    print("Onna")
else:
    print(ans)
if(x==2):
    ans=x1-x2
if (ans<0):
    print("Consultadd")
else:
    print(ans)
```



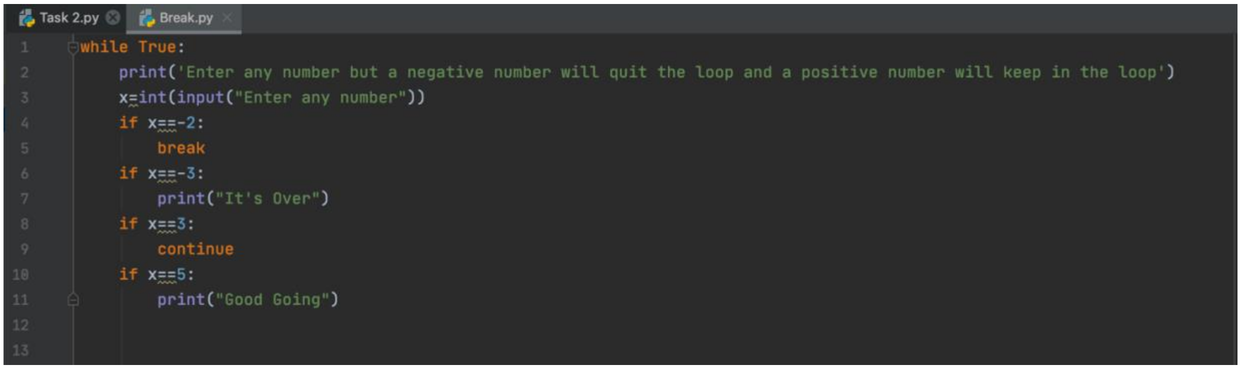
```
    ans=x1+x2
if(ans<0):
    print("Onna")
else:
    print(ans)
if(x==2):
    ans=x1-x2
if (ans<0):
    print("Consultadd")
else:
    print(ans)

if x==5:
    ans=x1+x2+x3+x4/4
if (ans<0):
    print("Negative")
```

3. Write a program in Python to implement the given flowchart:

```
    a = 10
    b = 20
    c = 30
    avg = (a+b+c) /3
    print (f" Average is {avg} ")

if avg > a and avg > b and avg > c:
    print ("Average is higher than a,b,c ")
else:
    if avg > a and avg > b:
        print ("Average is higher than a,b ")
    elif avg > a and avg > c:
        print ("Average is higher than a,c ")
    elif avg > b and avg > c:
        print ("Average is higher than b,c ")
else: if avg > a:
        print ("Average is just higher than a ")
    elif avg > b:
        print ("Average is just higher than b")
    elif avg > c:
    print ("Average is just higher than c")
```

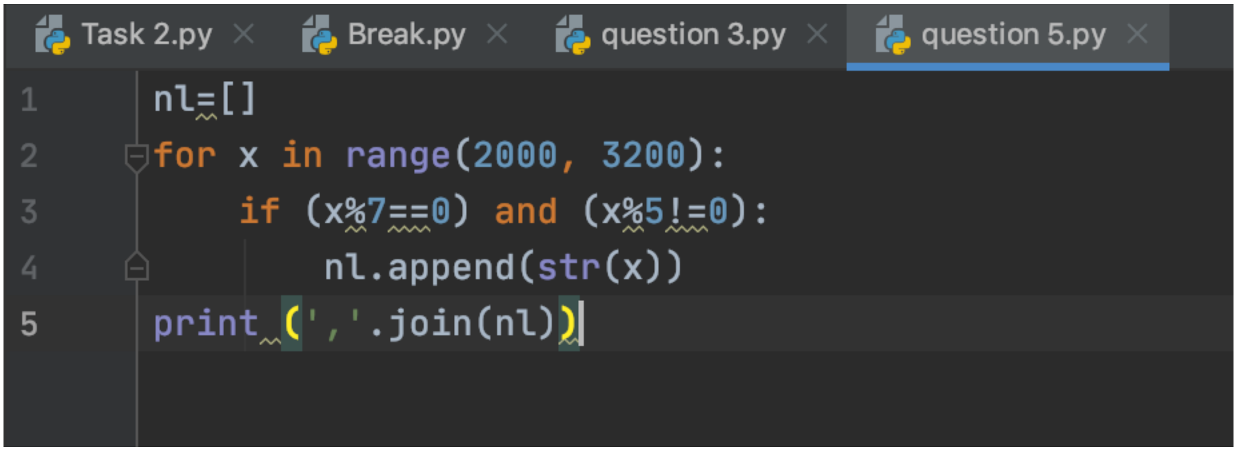
4. Write a program in Python to break and continue if the following cases occurs:

- If user enters a negative number just break the loop and print “It’s Over”
- If user enters a positive number just continue in the loop and print “Good Going”



```
while True:
    print('Enter any number but a negative number will quit the loop and a positive number will keep in the loop')
    x=int(input("Enter any number"))
    if x==-2:
        break
    if x==-3:
        print("It's Over")
    if x==3:
        continue
    if x==5:
        print("Good Going")
```

5. Write a program in Python which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200.



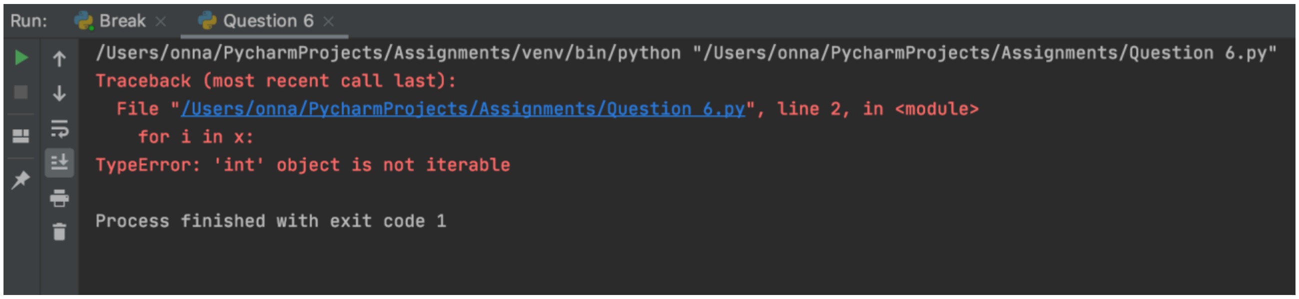
```
nl=[]
for x in range(2000, 3200):
    if (x%7==0) and (x%5!=0):
        nl.append(str(x))
print (','.join(nl))
```

6. What is the output of the following code examples?

- x=123

  for i in x:

  print(i)



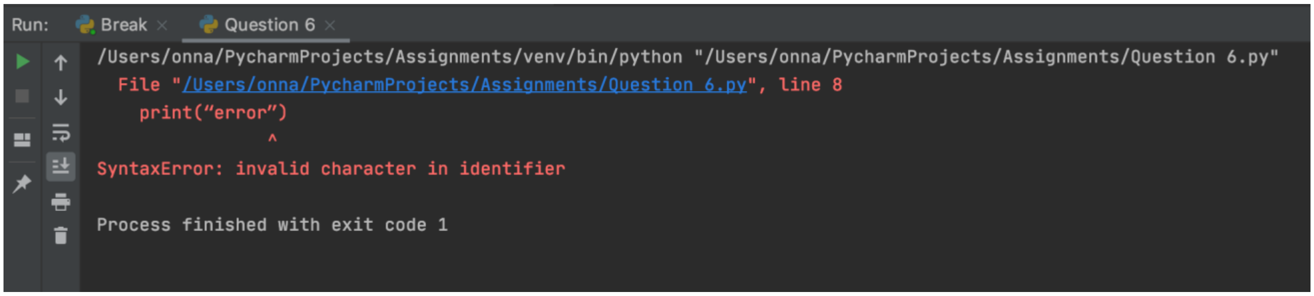
```
/Users/onna/PycharmProjects/Assignments/venv/bin/python "/Users/onna/PycharmProjects/Assignments/Question 6.py"
Traceback (most recent call last):
  File "/Users/onna/PycharmProjects/Assignments/Question 6.py", line 2, in <module>
    for i in x:
TypeError: 'int' object is not iterable

Process finished with exit code 1
```

- i = 0

  while i < 5:

  print(i)

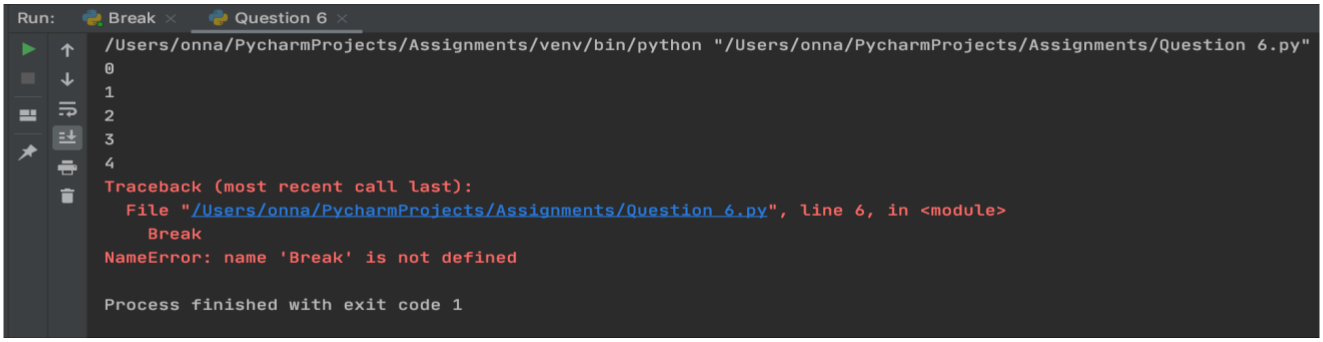
```
    i += 1
    if i == 3:
        break
else:
    print(“error”)
```



```
/Users/onna/PycharmProjects/Assignments/venv/bin/python "/Users/onna/PycharmProjects/Assignments/Question 6.py"
  File "/Users/onna/PycharmProjects/Assignments/Question 6.py", line 8
    print(“error”)
                ^
SyntaxError: invalid character in identifier

Process finished with exit code 1
```

- count = 0

```
while True:
    print(count)
    count += 1
    if count >= 5:
        Break
```

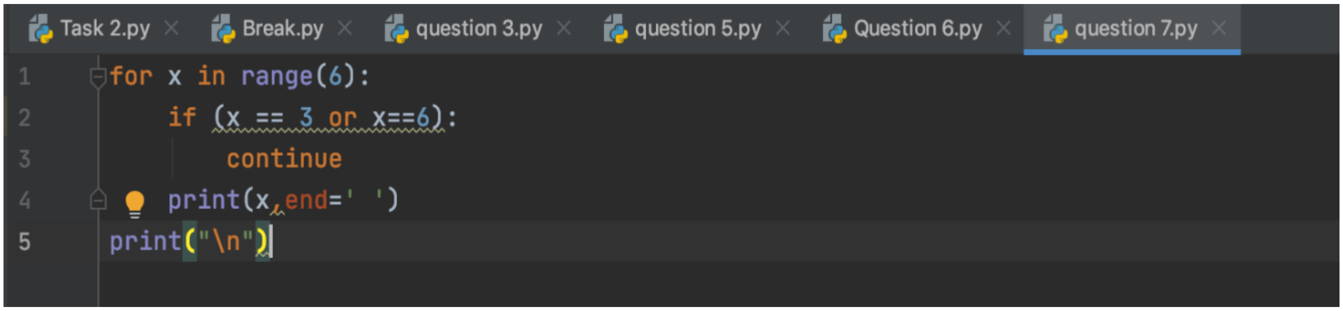


```
/Users/onna/PycharmProjects/Assignments/venv/bin/python "/Users/onna/PycharmProjects/Assignments/Question 6.py"
0
1
2
3
4
Traceback (most recent call last):
  File "/Users/onna/PycharmProjects/Assignments/Question 6.py", line 6, in <module>
    Break
NameError: name 'Break' is not defined

Process finished with exit code 1
```

7. Write a program that prints all the numbers from 0 to 6 except 3 and 6.

Expected output: 0 1 2 4 5

Note: Use ‘continue’ statement



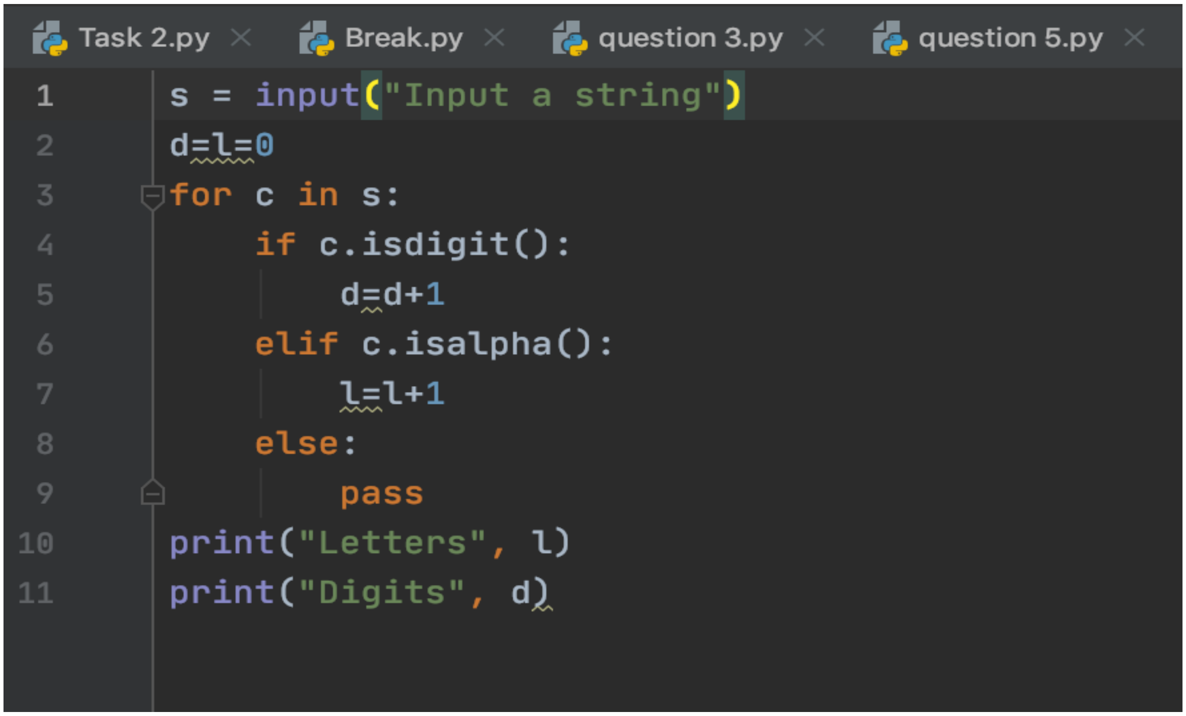
```python
for x in range(6):
    if (x == 3 or x==6):
        continue
    print(x,end=' ')
print("\n")
```

8. Write a program that accepts a string as an input from user and calculate the number of digits and letters.

Expected output: consul12

Letters 6

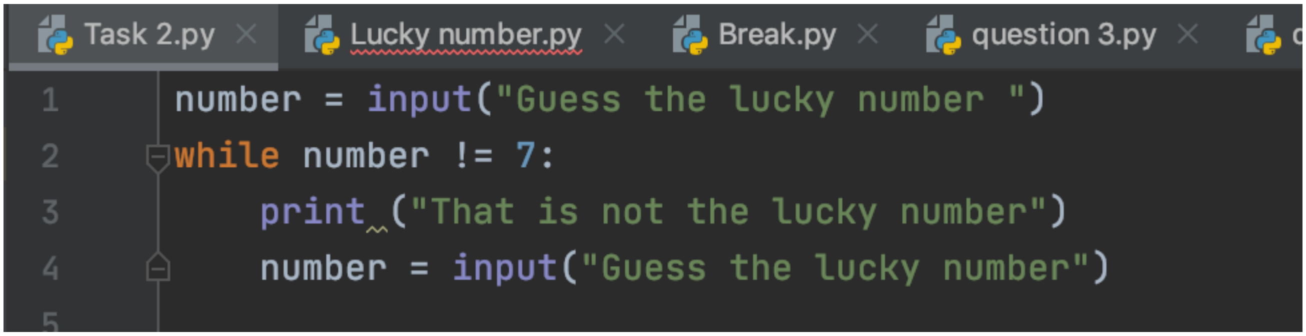
Digits 2



```python
s = input("Input a string")
d=l=0
for c in s:
    if c.isdigit():
        d=d+1
    elif c.isalpha():
        l=l+1
    else:
        pass
print("Letters", l)
print("Digits", d)
```

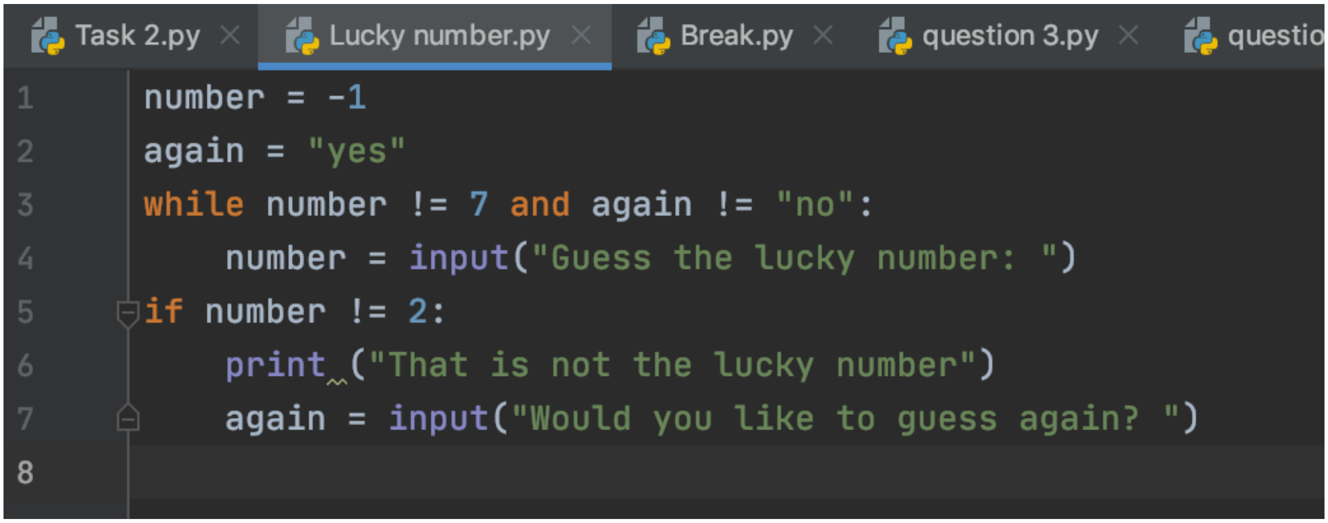
9. Read the two parts of the question below:

- Write a program such that it asks users to “guess the lucky number”. If the correct number is guessed the program stops, otherwise it continues forever.



```python
number = input("Guess the lucky number ")
while number != 7:
    print ("That is not the lucky number")
    number = input("Guess the lucky number")
```

- Modify the program so that it asks users whether they want to guess again each time. Use two variables, ‘number’ for the number and ‘answer’ for the answer to the question whether they want to continue guessing. The program stops if the user guesses the correct number or answers “no”. (The program continues as long as a user has not answered “no” and has not guessed the correct number)

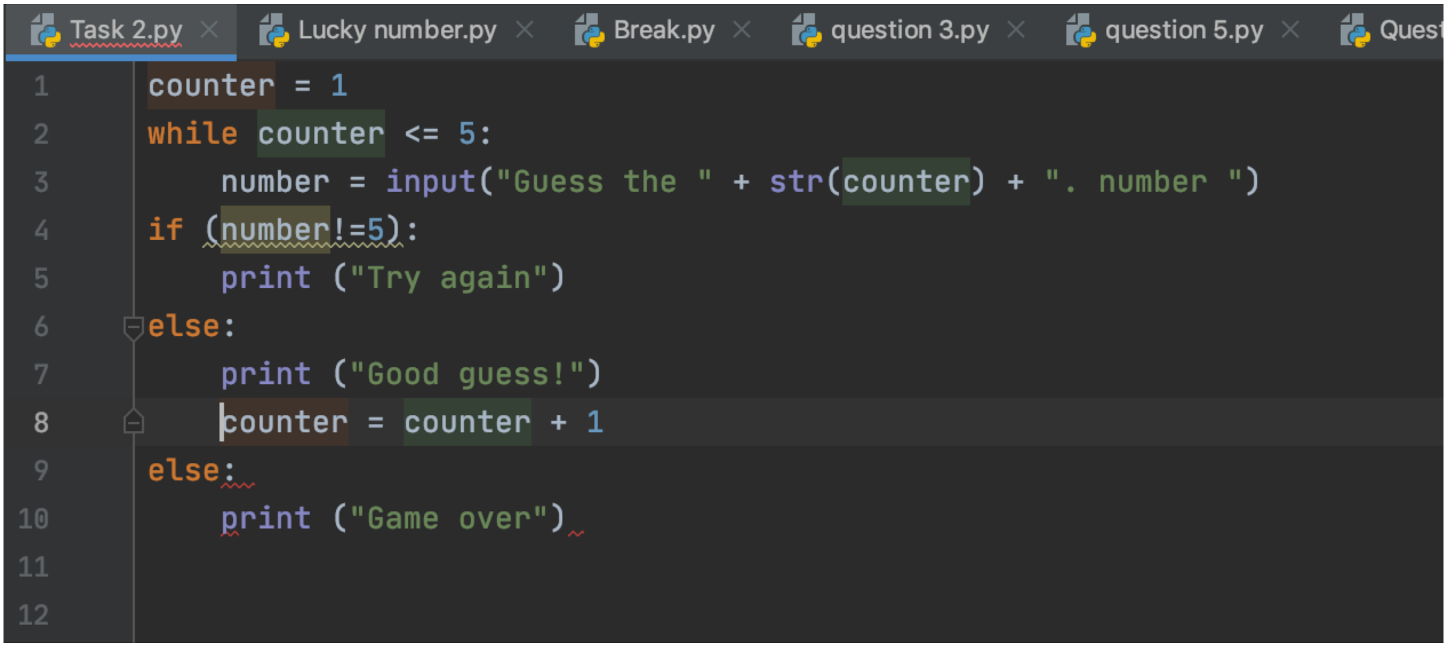


```
number = -1
again = "yes"
while number != 7 and again != "no":
    number = input("Guess the lucky number: ")
if number != 2:
    print (("That is not the lucky number")
    again = input("Would you like to guess again? ")
```

10. Write a program that asks five times to guess the lucky number. Use a while loop and a counter, such as

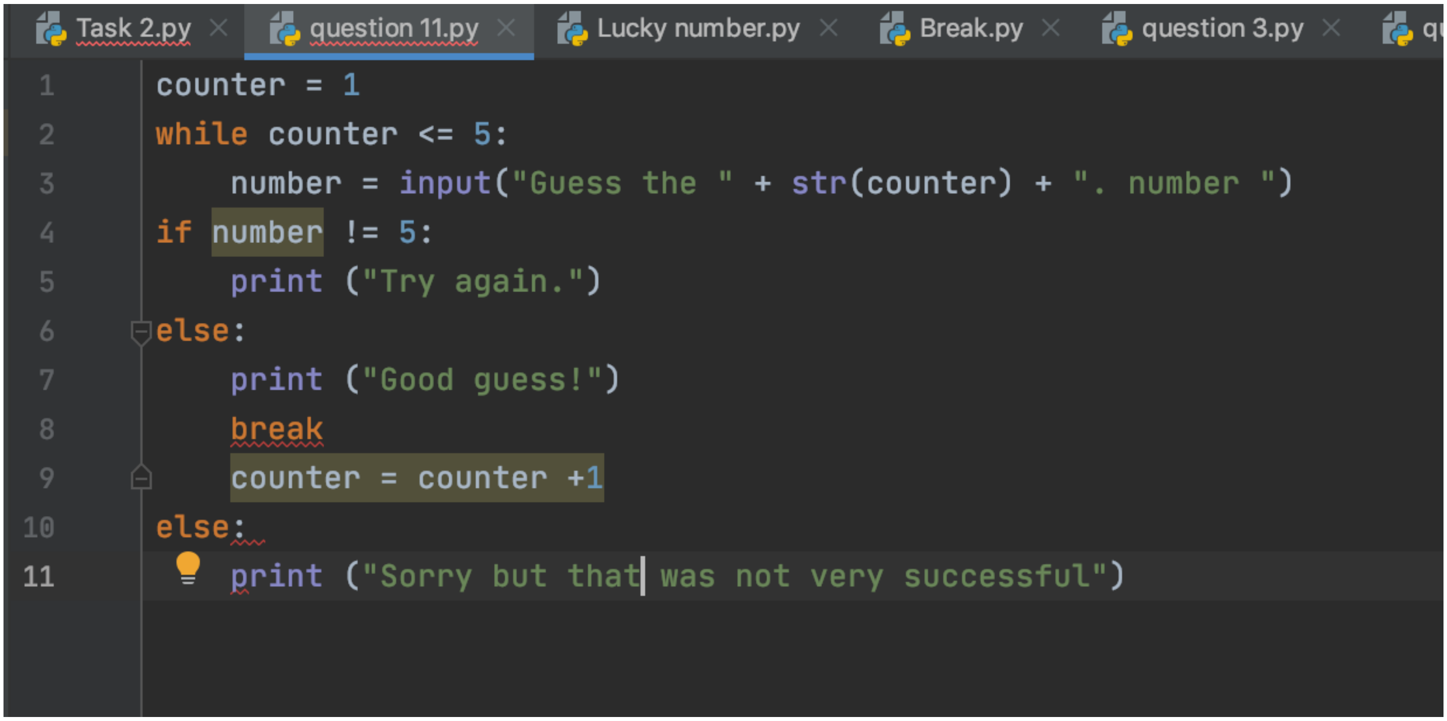
```
        counter=1
While counter <= 5:
        print(“Type in the”, counter, “number”
        counter=counter+1
```

The program asks for five guesses (no matter whether the correct number was guessed or not). If the correct number is guessed, the program outputs “Good guess!”, otherwise it outputs “Try again!”. After the fifth guess it stops and prints “Game over!”.



```
counter = 1
while counter <= 5:
    number = input("Guess the " + str(counter) + ". number ")
if (number!=5):
    print ("Try again")
else:
    print ("Good guess!")
    counter = counter + 1
else:
    print ("Game over")
```

11. In the previous question, insert “break” after the “Good guess!” print statement. “break” will terminate the while loop so that users do not have to continue guessing after they found the number. If the user does not guess the number at all, print “Sorry but that was not very successful”.



```
counter = 1
while counter <= 5:
    number = input("Guess the " + str(counter) + ". number ")
if number != 5:
    print ("Try again.")
else:
    print ("Good guess!")
    break
    counter = counter +1
else:
    print ("Sorry but that was not very successful")
```