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 “Python Training” as a string  
. If a number is divisible by both 3 and 5 it should print “Consultadd - Python Training” as a  
string.  
  
a = int(input("enter a number:"))  
if a % 3==0 and a % 5==0:  
 print("Consultadd-Python training")  
  
elif a % 3==0:  
 print("consultadd")  
elif a % 5==0:  
  
 print("Python training")  
  
else:  
 print("bye")

2.

print('''Enter 1 for Addition  
 Enter 2 for Subtraction  
 Enter 3 for Division  
 Enter 4 for Multiplication  
 Enter 5 for Average   
 ''')  
i = input("enter your choice:")  
num1= int(input("Enter a number:"))  
num2= int(input("Enter a number:"))  
  
if i ==1:  
 a=num1+num2  
 print(a)  
  
elif i == 2:  
 a = num1 - num2  
 print(a)  
  
elif i ==4:  
 a= num1\*num2  
 print(a)  
  
elif i ==3:  
 a= num1 / num2  
 print(a)  
  
elif i ==5:  
  
 a = (num1+num2)/2  
 print(a)  
if a < 0:  
 print("Negative")  
  
else:  
 print("wrong choice")

3.

a = 10  
b = 20  
c = 30  
avg=(a+b+c) / 3  
print ("avg =",avg)  
if avg > a and avg > c:  
 print('avg is hihger",a,b,c)  
elif avg > a and avg > b:  
 print("avg is higher",a,b,c)  
elif avg > a and avg > c:  
 print("avg is higher",a,c)  
elif avg > b and avg > c:  
 print("avg is higher",b,c)  
elif avg > a:  
 print("avg is just higher",a)  
elif avg > b:  
 print("avg is just higher",b)  
elif avg > c:  
 print("avg is just higher",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”

n=int(input("enter a number:"))  
while True:  
 if n<0:  
 print("its over")  
 break  
 elif n>=0:  
 print("Good Going")  
 continue

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.

n1=[]  
for i in range(2000 , 3200):  
 if i%7 ==0 and i%5 !=0:  
 n1.append(i)  
print(n1)

.6 what will be the output of following programs:

##x=123  
 for i in x:  
 print(i)

Output-- giving error

##i = 0  
while i < 5:  
 print(i)  
 i += 1  
 if i == 3:  
 break  
else:  
 print ("error")

Output--It will run till when i==2 and stop.

##count= 0  
while True:  
 print(count)  
 count += 1  
 if count >= 5:  
 break

Output== it will print till count==4 and will stop.

##7Write 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

for x in range(6):  
 if (x == 3 or x==6):  
 continue  
 print(x,end=" " )

##8 Write a program that accepts a string as an input from the user and calculate the number of digits and letters. Sample input: consul72 Expected output: Letters 6 Digits 2

string=input("enter anything: ")  
  
count1=0  
count2=0  
for i in string:  
 if i.isalpha():  
 count1=count1+1  
 elif i.isdigit():  
 count2=count2+1  
 else:  
 pass  
print("Number of characters:",count1)  
print("number of digits:",count2)

##9

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.

number=input("enter a lucky number:")  
while number!= 5:  
 print("Number is lucky")  
 number = input("enter a 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=int(input("enter a lucky number:"))  
answer=int(input("lucky number:"))  
while number==answer:  
 print("Number is lucky")  
 break  
 print("no")

##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:  
 print("type in the ", counter, "number")  
 number = int(input("enter a number"))  
 answer= int(input("Guess the Number"))  
 if number==answer:  
 print("Good guess")  
 else:  
 print ("Try again")  
 counter = counter +1  
 if counter >5:  
 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:  
 print("type in the ", counter, "number")  
 number = int(input("enter a number"))  
 answer= int(input("Guess the Number"))  
 if number==answer:  
 print("Good guess")  
 break