**TASK TWO**

**OPERATORS AND DECISION MAKING STATEMENT**

**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 the 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("Number neither divisible by 3 nor 5")

**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 two numbers and keep those numbers in variables num1 and num2

respectively for the first 4 options mentioned above.

Ask the user to enter two more numbers as first and second for calculating the average as

soon as the user chooses an option 5.

At the end if the answer of any operation is Negative print a statement saying “**NEGATIVE**”

**NOTE:** At a time a user can only perform one action.

print("Enter which operation would you like to perform?")

ch = input("""Enter any of these char for specific operation:

            Addition(+),

            Substract(-),

            Multiply(\*),

            Divide(/)

            Average(avg)

            Please choose one option: """)

num1 = int(input("Enter First Number: "))

num2 = int(input("Enter Second Number: "))

result = 0

if ch == '+':

    result = num1 + num2

elif ch == '-':

    result = num1 - num2

elif ch == '\*':

    result = num1 \* num2

elif ch == '/':

    result = num1 / num2

elif ch == 'avg':

    num3 = int(input("Enter 3rd Number: "))

    num4 = int(input("Enter 4th Number: "))

    total = num1 + num2 +num3 + num4

    avg = total / 4

    result = avg

else:

    print("Input character is not recognized!")

print(num1, ch , num2, "=", result)

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

 = int(input("Enter the Number: "))

b = int(input("Enter the Number: "))

c = int(input("Enter the Number: "))

avg = (a+b+c)/3

if (avg>c and avg>b and avg>c):

    print("Avg is higher than a , b, c")

    elif (avg>a and avg>b):

        print("Avg is higher than a,b,c")

    elif (avg>a and avg>c):

        print("Avg is higher than a,c")

    elif (avg>b and avg>c):

        print("Avg is higher than b,c")

    elif avg>a:

        print("Avg is just higher than a")

    elif avg>b:

        print("Avg is just higher than b")

    elif avg>c:

        print("Avg is just higher than a")

**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**”

a=int(input("Enter the number:"))

while a<=0:

    print("its over")

    break

else:

    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)

**It is throwing an error:**

**for i in x:**

**TypeError: 'int' object is not iterable**

i = 0

while i < 5:

print(i)

i += 1

if i == 3:

break

else:

print(“error”)

**O/P:**

**0**

**1**

**2**

count = 0

while True:

print(count)

count += 1

if count >= 5:

Break

o/p:

0

1

2

3

4

**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

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 the user and calculate the number of digits

and letters.

Sample input: consul72

Expected output: Letters 6 Digits 2

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.

number = input("Guess the lucky number ")

while number != 5:

   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 != 5 and again != "no":

    number = input("Guess the lucky number: ")

    if number != 5:

        print ("That is not the lucky number")

        again = raw\_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")