ASSIGNMENT 2

1] Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).

```python
for i in range(1500,2701):
    if(i%7==0 and i%5==0):
        print(i)
```

2] Write a Python program to convert temperatures to and from Celsius, Fahrenheit.

```python
temp = input("Enter temperature : ")
if(temp.endswith('F')):
    f = float(temp[:len(temp)-1])
    c = (5/9) * (f-32)
    print(c)
elif (temp.endswith('C')):
    c = float(temp[:len(temp)-1])
    f = ((9/5) * c) + 32
    print(f)
else:
    print("Invalid Input")
```

3] Write a Python program to get the Fibonacci series between 0 to 50.

```python
a,b = 0,1
print(a)
while (b < 50):
    a,b = b,a+b
    print(a)
```

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

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

5] Write a Python program that accepts a string and calculate the number of digits and letters.

```python
mystr = input("Input a string : ")
acount,dcount = 0,0
for i in mystr:
    if(i.isdigit()):
        dcount = dcount + 1
    elif(i.isalpha()):
        acount = acount + 1
print("Digits = ",dcount , "Alphabets : ",acount)
```

6] Write a Python program to print alphabet pattern 'Z'.

```python
n = int(input("Enter a number : "))
print("*"*n)
for i in range(2,n):
    print(" "*(n-i),"*",sep="")
print("*"*n)
```

7] Write a Python program to print alphabet pattern 'S'

```python
n = int(input("Enter a number : "))
print(" ","*"*n,sep="")
for i in range(1,n-1):
    print("*")
print(" ","*"*(n-1),sep="")
for i in range(1,n-1):
    print(" "*(n),"*",sep="")
print("*"*n)
```

8] Write a Python program to construct the following pattern, using a nested loop number. Expected Output:

```
1
22
333
4444
55555
666666
7777777
88888888
999999999
```

```python
for item in [str(i)*i for i in range(1,10)]: print(item,sep="\n")
```

9] Write a Python program that accepts a word from the user and reverse it. (Without word[::-1])

```python
mystr = input("Enter a string : ")
mystr = "".join(reversed(mystr))
print(mystr)
```

10] Write a Python program to calculate the sum and average of n integer numbers.

```python
n = int(input("Enter value of n : "))
sum = 0;
for i in range(n):
    num = int(input())
    sum = sum + num
print("Sum = ",sum,"Average = ",sum/n)
```