ASSIGNMENT - 1

Assignment date	19 September 2022
Student name	S. PRABHAVATHY
Student register number	310619106100
Maximum marks	2 Marks

Prg 1:

```
# Program to check if a number is prime or not

num = 29

# To take input from the user
#num = int(input("Enter a number: "))

# define a flag variable
flag = False

# prime numbers are greater than 1
if num > 1:
   # check for factors
   for i in range(2, num):
      if (num % i) == 0:
         # if factor is found, set flag to True
         flag = True
         # break out of loop
         break

# check if flag is True
if flag:
   print(num, "is not a prime number")
```

```
else:
   print(num, "is a prime number")
```

prg 2:

```
# Python program to print Even Numbers in given range

start = int(input("Enter the start of range:"))
end = int(input("Enter the end of range:"))

# iterating each number in list
for num in range(start, end + 1):

        # checking condition
        if num % 2 != 0:
                print(num)
```

prg 3:

```
# Python program to display all the prime numbers within an interval

lower = 900
upper = 1000

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):
  # all prime numbers are greater than 1
  if num > 1:
     for i in range(2, num):
        if (num % i) == 0:
           break
     else:
        print(num)
```

prg 4:

```
# Program to display the Fibonacci sequence up to n-th term

nterms = int(input("How many terms? "))

# first two terms
n1, n2 = 0, 1
count = 0

# check if the number of terms is valid
if nterms<= 0:
   print("Please enter a positive integer")
# if there is only one term, return n1
elifnterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
# generate fibonacci sequence
else:
   print("Fibonacci sequence:")
   while count <nterms:
       print(n1)
       nth = n1 + n2
       # update values
       n1 = n2
       n2 = nth
       count += 1
```