Assignment -4

Python Programming

Assignment Date	23 September 2022
Student Name	Santhosh Kumar R
Student Roll Number	820419104060
Maximum Marks	2 Marks

Question-1:

Write a python program to test a given number is prime or not

Solution:

```
num = int(input("Enter a number: "))
if num > 1:
for i in range(2,num):
if (num % i) == 0:
print(num,"is not a prime number")
print(i,"times",num//i,"is",num)
break
else:
print(num,"is a prime number")
else:
print(num,"is not a prime number")
```

```
num = int(input("Enter a number: "))
if num > 1:
   for i in range(2,num):
       if (num % i) == 0:
           print(num,"is not a prime number")
           print(i,"times",num//i,"is",num)
           break
   else:
       print(num,"is a prime number")

else:
   print(num,"is not a prime number")
```

```
>>>
Enter a number: 7
(7, 'is a prime number')
>>>
```

Question-2:

write a program to generate odd numbers from m to n using while loop.

Solution:

Start=int(input(“Enter Start of Range:”))
end=int(input(“Enter End of Range:”))
For num in range(start, end+1):
    If num % 2 !=0:
      Print(num)

```
start = int(input("Enter the start of range:"))
end = int(input("Enter the end of range:"))
for num in range(start, end + 1):
    if num % 2 != 0:
        print(num)
```

```
Enter the start of range:1
Enter the end of range:10
1
3
5
7
9
>>>
```

Question-3:

Write a python program to display prime number series upto a given number.

Solution:

```
upto = int(input("Find prime numbers upto : "))
for num in range(2, upto + 1):

  i = 2

  for i in range(2, num):
    if(num % i == 0):
      i = num
      break;

  if(i != num):
    print(num)
```

```
upto = int(input("Find prime numbers upto : "))
for num in range(2, upto + 1):

    i = 2

    for i in range(2, num):
        if(num % i == 0):
            i = num
            break;

    if(i != num):
        print(num)
```

```
>>>
Find prime numbers upto : 10
3
5
7
>>>
```

Question-4:

Write a python program to generate Fibonacci series

Solution:

```
nterms = int(input("How many terms? "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
  print("Please enter a positive integer")
 elif nterms == 1:
  print("Fibonacci sequence upto",nterms,":")
  print(n1)
else:
  print("Fibonacci sequence:")
  while count < nterms:
     print(n1)
     nth = n1 + n2
     n1 = n2
     n2 = nth
     count += 1
```

```
nterms = int(input("How many terms? "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
   print("Please enter a positive integer")


elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)


else:
   print("Fibonacci sequence:")
   while count < nterms:
       print(n1)
       nth = n1 + n2
       n1 = n2
       n2 = nth
       count += 1
```

```
>>>
How many terms? 5
Fibonacci sequence:
0
1
1
2
3
>>>
```