

Assignment -4
Python Programming

Assignment Date	23 September 2022
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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
>>> |
```

