

PYTHON ASSIGNMENT

1.FIBONACCCI SERIES:

PROGRAM:

```
a = 0
b = 1
n = int(input("Enter the range of fibonacci numbers you wish to find"))
print(a)
print(b)
for i in range(0,n-2):
    fib = a + b
    print(fib)
    a = b
    b = fib
    i = i + 1
```

OUTPUT:

Shell Clear

```
Enter the range of fibonacci numbers you wish to find10
0
1
1
2
3
5
8
13
21
34
> _
```

2.PRIME NUMBER IN A RANGE:

PROGRAM:

```
a = int(input("Enter the lower bound: "))
b = int(input("Enter the upper bound: "))
for i in range(a,b+1):
    if i > 1:
        for j in range(2, i):
            if (i % j) == 0:
                break
        else:
            print(i , " is a prime number")
    else:
        print(i , " is neither prime nor composite")
```

OUTPUT:

Shell Clear

```
Enter the lower bound: 0
Enter the upper bound: 10
0 is neither prime nor composite
1 is neither prime nor composite
2 is a prime number
3 is a prime number
5 is a prime number
7 is a prime number
> _
```

3. ODD NUMBER IN WHILE LOOP

PROGRAM:

```
print("Finding odd numbers in a given range....")  
  
m = int(input("From : "))  
  
n = int(input("To :"))  
  
while m < n+1:  
    if(m%2)!=0:  
        print("{} is a odd number".format(m))  
  
    m = m + 1
```

OUTPUT:

Shell Clear

```
Finding odd numbers in a given range....  
From : 0  
To : 20  
1 is a odd number  
3 is a odd number  
5 is a odd number  
7 is a odd number  
9 is a odd number  
11 is a odd number  
13 is a odd number  
15 is a odd number  
17 is a odd number  
19 is a odd number  
> |
```

4. CHECK PRIME NOR COMPOSITE

PROGRAM:

```
a = int(input("Enter the number to check if it is a prime : "))  
if a > 1:  
    for i in range(2, a):  
        if (a % i) == 0:  
            print(a, " is not a prime number")  
            break  
    else:  
        print(a, " is a prime number")  
else:  
    print(a, " is neither prime nor composite")
```

OUTPUT:

```
Shell Clear  
Enter the number to check if it is a prime : 7  
7 is a prime number  
> |
```