TASK 2

1) Python program to print all the even numbers within a given range.

PROGRAM

```python
evenrange.py > ...
1    lower=int(input("enter lower limit:"))
2    upper=int(input("enter upper limit:"))
3    for i in range(lower,upper+1):
4        if i%2==0:
5            print(i)
```

OUTPUT

```
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Adm:
Desktop/task/evenrange.py
enter lower limit:10
enter upper limit:20
10
12
14
16
18
20
PS C:\Users\Admin\Desktop\task>
                                                                            Activate Windows
```

2) Python program to calculate the sum of odd numbers within the given range.

PROGRAM

```python
oddsum.py > ...
1    lower=int(input("enter lower limit:"))
2    upper=int(input("enter upper limit:"))
3    sum=0
4    for i in range(lower,upper+1):
5        if i%2!=0:
6            sum+=i
7    print(f"sum of odd numbers within {lower} and {upper} : {sum}")
```

OUTPUT

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS                          Python  +  ...  ^

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admi
Desktop/task/oddsum.py
enter lower limit:1
enter upper limit:10
sum of odd numbers within 1 and 10 : 25
PS C:\Users\Admin\Desktop\task>
```

3) Python program to check if the given string is a palindrome or not.

PROGRAM

```python
palindrome.py > ...
1  string=input("enter string:")
2  length=len(string)-1
3  result=""
4  for i in range(length,-1,-1):
5      result+=string[i]
6  print("palindrome" if result==string else "not palindrome")
```

OUTPUT

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS                    Python + ∨ □ 🗑 ··· ∧ ✕

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/palindrome.py
enter string:malayalam
palindrome
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/palindrome.py
enter string:hello
not palindrome
PS C:\Users\Admin\Desktop\task> []
```

4) Python program to check if a given number is an Armstrong number.

PROGRAM

```python
amstrong.py > ...
1   num=input("enter number:")
2   digit_count=len(num)
3   num=int(num)
4   sum=0
5   original=num
6   while(num!=0):
7       digit=num%10
8       exp=digit**digit_count
9       sum+=exp
10      num=num//10
11  print("amstrong" if original==sum else "not amstrong")
12
```

OUTPUT

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS                    Python + ∨ □ 🗑 ··· ∧ ✕

PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/amstrong.py
enter number:153
amstrong
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/amstrong.py
enter number:143
not amstrong
PS C:\Users\Admin\Desktop\task> ▮
```

5) Python program to get the Fibonacci series between 0 to 50.

PROGRAM

```python
stop=50
prev=0
next=1
print(prev)
print(current)
while(next<=stop):
        print(next)
        prev=current
        current=next
        next=prev+current
```

OUTPUT

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS                              Python  + v  □ 🗑  ···  ^  ×
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/fibonacci.py
0
1
1
2
3
5
8
13
21
34
PS C:\Users\Admin\Desktop\task>
```

6) Python program to check given number is prime or not.

PROGRAM

```python
num=int(input("enter number:"))
for i in range(2,num):
    if num%i==0:
      print(f"{num} is not a prime number")
      break
else:
    print(f"{num} is a prime number")
```

OUTPUT

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS                              Python  + v  □ 🗑  ···  ^  ×
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/prime.py
enter number:7
7 is a prime number
PS C:\Users\Admin\Desktop\task> & C:/Users/Admin/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Admin/
Desktop/task/prime.py
enter number:50
50 is not a prime number
PS C:\Users\Admin\Desktop\task>
```