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GitHub Link: https://github.com/Beshair-Khan/Python-Lab

Lab 02

Task 1: Print numbers from 1 to 10 using a for loop.

```
for i in range (1,11):
    print (i)
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

1
2
3
4
5
6
7
8
9
10
PS D:\Uni programs\Lab manuals>
```

Task 2: Print all even numbers between 1 and 20 using a while loop.

```
num=2
while num <=20:
    print(num)
    num+=2
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
2
4
6
8
10
12
14
16
18
20
PS D:\Uni programs\Lab manuals>
```

Task 3: Calculate the sum of numbers from 1 to 100 using a loop.

```
total=0
for num in range (1,101):
    total+=num
print(f"The sum of numbers from 1 to 100 is : {total}")
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
The sum of numbers from 1 to 100 is : 5050
PS D:\Uni programs\Lab manuals>
```

Task 4: Print the multiplication table of 5 using a loop.

```
table=5
print(f"Table of {table}")
for i in range (1,11):
    print(f"{table} x {i} = {table * i}")
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
Table of 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
PS D:\Uni programs\Lab manuals>
```

Task 5: Find the factorial of a given number using a for loop

```
num=int(input("Enter a number: "))
factorial=1
for i in range(1,num+1):
    factorial *=i
print ("Fcatorial of",num,"is",factorial)
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
Enter a number: 6
Fcatorial of 6 is 720
PS D:\Uni programs\Lab manuals>
```

Task 6: Create a list of numbers and print only the odd numbers using a loop.

```
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
for num in numbers:
    if num % 2 != 0:
        print(num)
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
1
3
5
7
9
PS D:\Uni programs\Lab manuals>
```

Task 7: Iterate over a list of fruits and print each item.

```python
fruits = ["apple", "banana", "cherry", "mango", "orange"]
for fruit in fruits:
    print(fruit)
```

Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

PS D:\Uni programs\Lab manuals> & D:/Python/python.exe "d:/Uni programs/Lab manuals/lab task1.py"
apple
banana
cherry
mango
orange
PS D:\Uni programs\Lab manuals>
```