Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester: (Spring, Year:2025), B.Sc. in CSE (Day)

Lab Task : 02
Course Title: Data Mining Lab
Course Code: CSE 436   Section: D3

Student Details

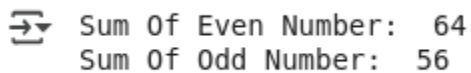|	Name	ID
1.	Md. Shakil Hossain	213002042

3.1.2 Lab Task:

Problem 1: Write a python program to find the sum of odd and even numbers from a set of numbers.

Code:

```python
add_odd = 0
add_even =0
for i in {1, 3,  8 ,47, 5,56}:
    if i%2==0:
        add_even=add_even+i
    else:
        add_odd=add_odd+i
print("Sum Of Even Number: ", add_even)
print("Sum Of Odd Number: ", add_odd)
```

Output:

```
Sum Of Even Number:  64
Sum Of Odd Number:  56
```

Problem 3: Write a python program to find the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5.

Code:

```python
sum =0
for i in range(50, 100):
 if i%3==0 and i%5!=0:
    sum=sum+i
print("the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5: ",sum)
```

Output:

the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5: 1050

Problem 4: Write a python program to find the second highest number from a set of numbers.

Code:

```python
num_list = {1, 3,  8 ,47, 5, 56}
highest = float('-inf')
second_height = float('-inf')

for num in num_list:
    if num > highest:
        second_height = highest
        highest = num
    elif num > second_height and num != highest:
        second_height = num

print("The second Height: ",second_height)
```

Output:

The second Height: 47

Problem 5: Write a python program to find the factorial of a number using for loop.

Code:

```python
factorial = 1
for i in range(1, 6):
```

```
    factorial = factorial*i
print("Factorial", factorial)
```

Output:

```
⇥  Factorial 120
```

Problem 6: Write a python program to generate Fibonacci series.

Code:
```
fibonacci_series = {}
for i in range(0, 8):
  if i <= 1:
    fibonacci_series[i] = i
  else:
    fibonacci_series[i] = fibonacci_series[i-1] + fibonacci_series[i-2]

print("Fibonacci Series: \n")
for i in fibonacci_series:
  print(fibonacci_series[i])
```

Output:

```
⇥  Fibonacci Series:

    0
    1
    1
    2
    3
    5
    8
    13
```

3.1.5 Lab Task:

Problem 3: Write a python program to find the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5.

Code:

```python
sum =0
for i in range(50, 100):
 if i%3==0 and i%5!=0:
   sum=sum+i
print("the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5: ",sum)
```

Output:

⊒▾ the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5: 1050

Problem 3: Write a python program to find the factorial of a number using while loop.

Code:

```python
factorial = 1
i=1
while i <= 5:
    factorial = factorial*i
    i=i+1
print("Factorial", factorial)
```
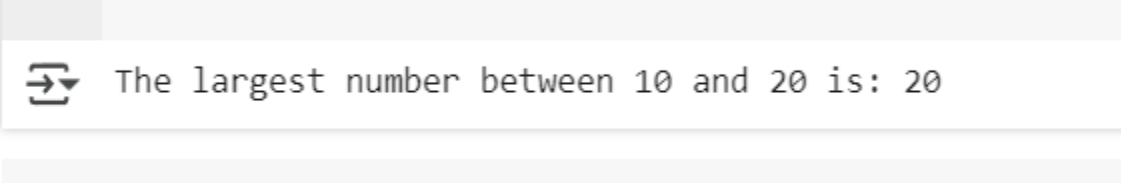
Output:

⊒▾ Factorial 120

4.2 Lab Task:

Problem 1: Write a python program to find the largest number between two numbers using function

Code:

```python
def find_largest(a, b):
    if a > b:
        return a
    else:
        return b


# Example usage:
num1 = 10
num2 = 20
print(f"The largest number between {num1} and {num2} is:
{find_largest(num1, num2)}")
```

Output:

The largest number between 10 and 20 is: 20

Problem 2: Write a python program to find the sum of the numbers passed as parameters.

Code:

```python
def sum_numbers(*args):
    return sum(args)


print(f"The sum of the numbers 1, 2, 3, and 4 is: {sum_numbers(1, 2, 3, 4)}")
```

Output:

```
The sum of the numbers 1, 2, 3, and 4 is: 10
```

5.4.3 Lab Task:

Problem 2: Write a Python function studentId () which will print the id of a student (studentId).
If the user passes an argument studentId or studentId the function will print the student name and
class.

Code:

```python
def studentId(student_id=None, student_name=None, student_class=None):
    if student_id is not None and student_name is not None and student_class
is not None:
        print(f"Student Name: {student_name}, Student Class:
{student_class}")
    else:
        print(f"Student ID: {student_id}")



studentId(student_id=101)


studentId(student_id=101, student_name="John Doe", student_class="10th")
```

Output:

```
Student ID: 101
Student Name: John Doe, Student Class: 10th
```