National University of Computer and Emerging Sciences



Lab Manual # 04

Programming Fundamental

(CS118)

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| Section | BCS-1A |
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| Problem 1: |  |

Write a C++ program that Calculate factorial of a number. Take that number from user.

For Example:

3! = 6

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| Problem 2: |  |

Calculate GCD of two integers by using while loop take that numbers from user.

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| Problem 3: |  |

Write a program that takes the limit of Fibonacci series.

Fibonacci series is like.

0 1 1 2 3

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| Problem 4: |  |

Compute sum of a number of its digits by using loop.

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| Problem 5: |  |

Write a program in C++ to display the input number in reverse order

**Sample Output:**

Input a number: 12345

The number in reverse order is: 54321

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| Problem 6: |  |

Write a C++ program that keep taking input numbers from user and terminate the program when

user enters -1. Your task is to add all those numbers before -1.

**Sample Run**

Enter your numbers:

2

5

7

1

5

‐1

**Output** Sum is 20

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| Problem 7: |  |

Write a C++ program that calculates the Product of two numbers WITHOUT using the \* operator. Your program must also do input validation and should display an error message in case of negative numbers being input.