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|  | **Computer Organization & Assembly Language**  **BSCS-3**  **Department of Computer Science**  **Bahria University, Lahore Campus** |

**Assignment: [4]**

Date: Week 13, 6th June 2023

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Roll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Evaluation of CLO** | **Question Number** | **Marks** | **Obtained Marks** |
| **CLO1,2,3** | 1 | 10 |  |
| 2 | 10 |  |
|  |  |  |
|  |  |  |
| **Total Marks** | | **20** |  |

**Question 1: [Marks: 10]**

Project Documentation

Must follow these guide line

* Previous work
* New work with images
* Benefit of your project
* Use case diagram
* Conclusion

Document should not be more than 5 pages and not less than 4 pages.

**Question 2: [Marks: 10]**

1. Implement a recursive program that takes in a number and finds the square of that number through addition. For example if the number 3 is entered, you would add 3+3+3=9. If 4 is entered you would add 4+4+4+4=16. This program must be implemented using recursion to add the numbers together.
2. Write a recursive function to calculate the summation of numbers from 1 to n. For example if the user enters 5, your program would add 1+2+3+4+5 and print out the answer 15.
3. Write a recursive program to calculate Fibonacci numbers. Use the definition of a Fibonacci number where F(n) = F(n-1) + F(n-2).