

## **Course on AI-CSD311**

**Assignment 3** [Total marks 10] (To be done individually)

**Posting Date:** 14/ Feb/ 2021

**Marks: 10**

**Submission date:**

- Early bird submission: 20<sup>th</sup> Feb 3.30pm
- Normal Submission: 24/Feb/2021 by 9 pm along with execution of the programs for min 3 test data.

**Note:**

1. Early birds will be rewarded with 2 extra points if have given demo in the Lab class of 20th and marks obtained in the assignment is > 8.
2. Plagiarism zero tolerance. If found code copied, -10 will be awarded.
3. Remaining will be evaluated in Lab class of 27<sup>th</sup> Feb.

Write Prolog Programs for the following problems and submit programs with run of each for 2-3 test data

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|---|-------------|
| 1. Find the length of a list.   | (1 mark)    |
| 2. Find the maximum of a list elements  | (1 mark)    |
| 3. Find the last element of a list.   | (1 mark)    |
| 4. Find the sum of the elements of a list.  | (1 mark)    |
| 5. Find the kth element of the list.  | (1 mark)    |
| 6. Reverse the elements of a list   | (1 mark)    |
| 7. Check if a given number is palindrome.   | (1 mark)    |
| 8. Find the sum of positive and negative separately of the elements of given list | (1.5 marks) |
| 9. Find the sum of first n term of Fibonacci series                               | (1.5 marks) |