Course: Artificial Intelligence Lab
Assignment List: Week-3

1. Write a Prolog program to implement maxlist(List, Max) so that Max returns the largest number in the list of numbers List (using CUT and without using CUT).

2. Write a Prolog program to implement sumlist(List,Sum) so that Sum returns the sum of a given list of numbers List.

3. Write a Prolog program to implement two predicates evenlength(List) and oddlength(List) so that they are true if their argument is a list of even or odd length respectively.

4. Write a Prolog program to implement reverse(List,ReversedList) that reverses a list.

5. Write a Prolog program to implement palindrome(List).

6. Write a Prolog program to append for two lists.

7. Write a Prolog program, remove(Before, After, Item) that generates a new list "After" after the removal of "Item" from the list "Before" at all locations.

8. Write a Prolog program, insert_nth(item, n, into_list, result) that generates a new list "result" after inserting nth element into the list "into_list".

9. Write a Prolog program to remove the N-th item from a list.

10. Write a Prolog program that compares two lists and returns the number of locations where they differ (element wise).