

# **Artificial Intelligence Lab**

Code: PMDS601P

## **Digital Assignment 2**

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**Course: M.Sc in Data Science**

**Write a Prolog program defining a predicate remove\_duplicates/2 which takes two parameters- the first parameter is a list, while the second parameter returns a list after removing all duplicate elements**

**Code:**

```
remove_duplicates([],[]).
```

```
remove_duplicates([Head | Tail], [Head | Result]) :-  
    \+ member(Head, Tail),  
    remove_duplicates(Tail, Result).
```

```
remove_duplicates([Head | Tail], Result) :-  
    member(Head, Tail),  
    remove_duplicates(Tail, Result).
```

**Output:**

```
% c:/Users/sambh/OneDrive/Documents/Prolog/AIDA2.pl c  
?- remove_duplicates([1,2,3,3,2,4,4,9,9], Result).  
Result = [1, 3, 2, 4, 9] |
```