2CSDE85 - Artificial Intelligence

Practical 6

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Aim: Write a PROLOG program on lists (1) To find whether given element is a member of list (2) Inserting an element at beginning, end desired position

Code:

```
member(_,[], _) :- write("Not a member"),n1.

member(X,[X|_], N) :- write("Found at index:-"),write(N), n1.

member(X, [_|T], N):- N1 is N+1, member(X,T, N1).

member(X, Y):-member(X,Y,0).

insert_beg(X,L, [X|L]).
insert_beg(X,L) :- insert_beg(X,L,Z), write("New list is :-"), write(Z), n1.
insert_tail(X,[], [X]).

insert_tail(X,[Y|T], [Y|T1]):-insert_tail(X,T,T1).

insert_tail(X,L) :- insert_tail(X,L,Z), write("New list is :-"), write(Z), n1.

insert_pos(X, [Y|T], Pos, N):- Pos2 is Pos-1,
insert_pos(X, T, Pos2, Temp), insert_beg(Y, Temp, N).
```

Output: