# **Assignment 16**

**Write a Prolog program to implement nth\_element (N, L, X) where N is the desired position, L is a list and X represents the Nth element of L.**

start:-write('Nth Element\n'),

write('Enter a list: '),

read(L),

length(L,T),

not\_empty(T)->

write('Enter position: '),

read(N),

(check(N,T)->

nth\_element(N,L,X),

write('Element: '),

write(X);

write('Invalid Position'),fail);

write('List is empty').

nth\_element(1,[H|T],H).

nth\_element(N,[H|T],X):-N1 is N-1,nth\_element(N1,T,X).

check(N,T):-N>=1,N =< T.

not\_empty(T):-T > 0.

**Output**

