ARIFICIAL INTELLIGENCE PRACTICAL FILE

NAME = MOHD SHOHEL

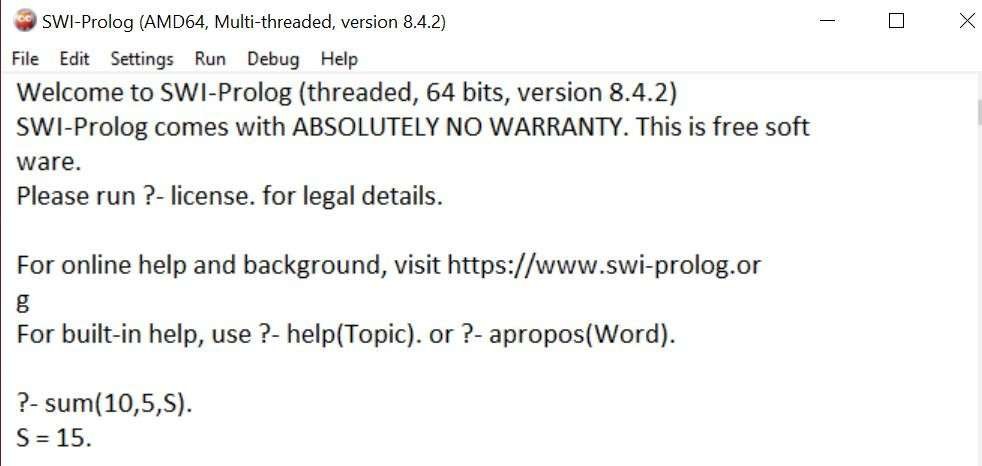
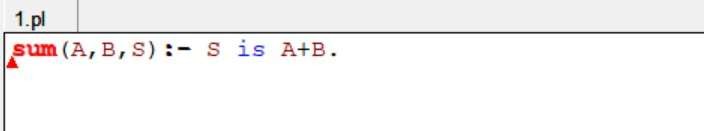
ROLL NUMBER = 20201417

EXAMINATION ROLL NO. = 20020570022

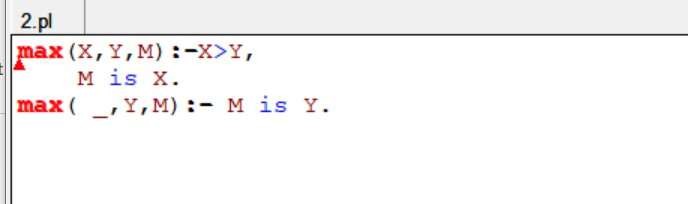
COURSE = BSc(Hons) COMPUTER SCIENCE

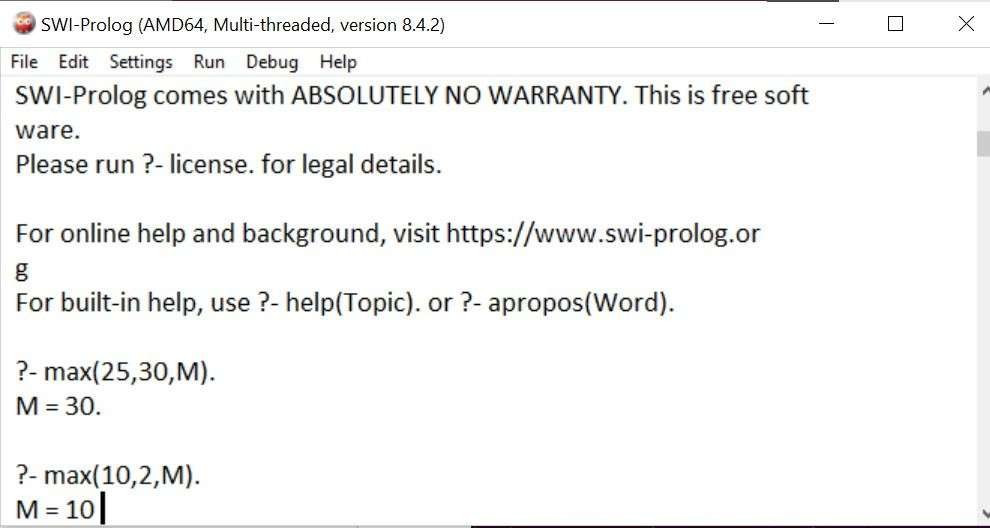
SUBMIT TO = MR SUBODH KUMAR SIR

**Program 1: Write a prolog program to calculate the sum of two numbers.**

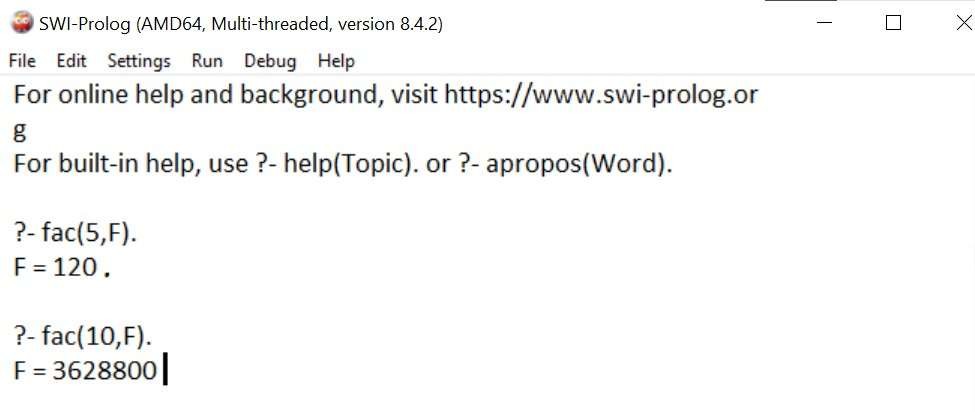


Program 2: Write a Prolog program to implement max(X, Y, M) so that M is the maximum of two numbers X and Y.

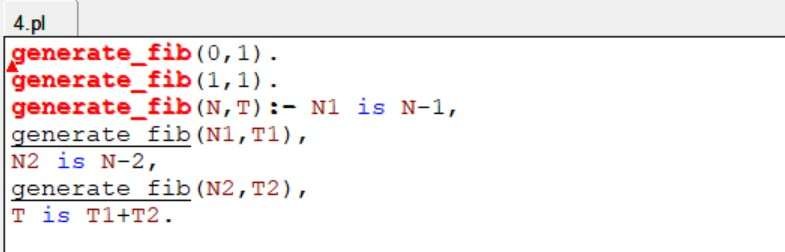


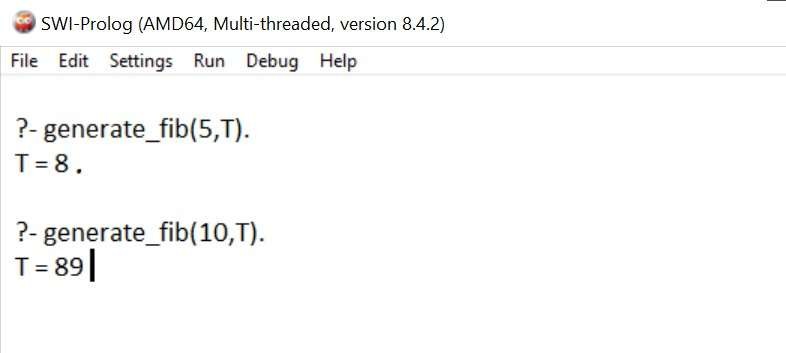


Program 3: Write a program in PROLOG to implement factorial (N, F) where F represents the factorial of a number N.

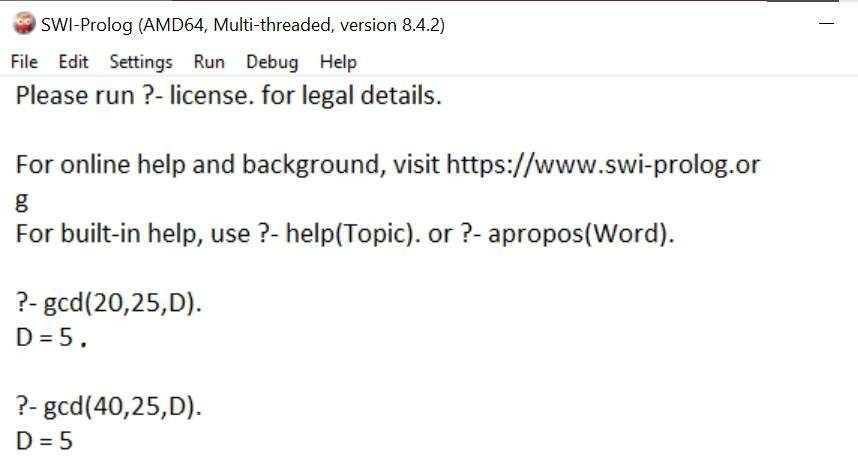
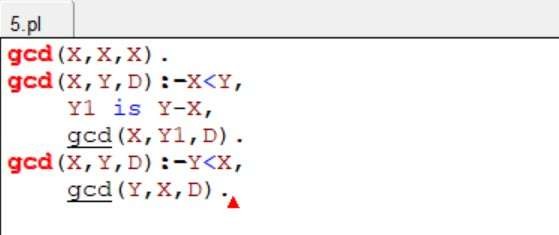


**Program 4: Write a program in PROLOG to implement generate\_fib(N,T) where T represents the Nth term of the fibonacci series.**

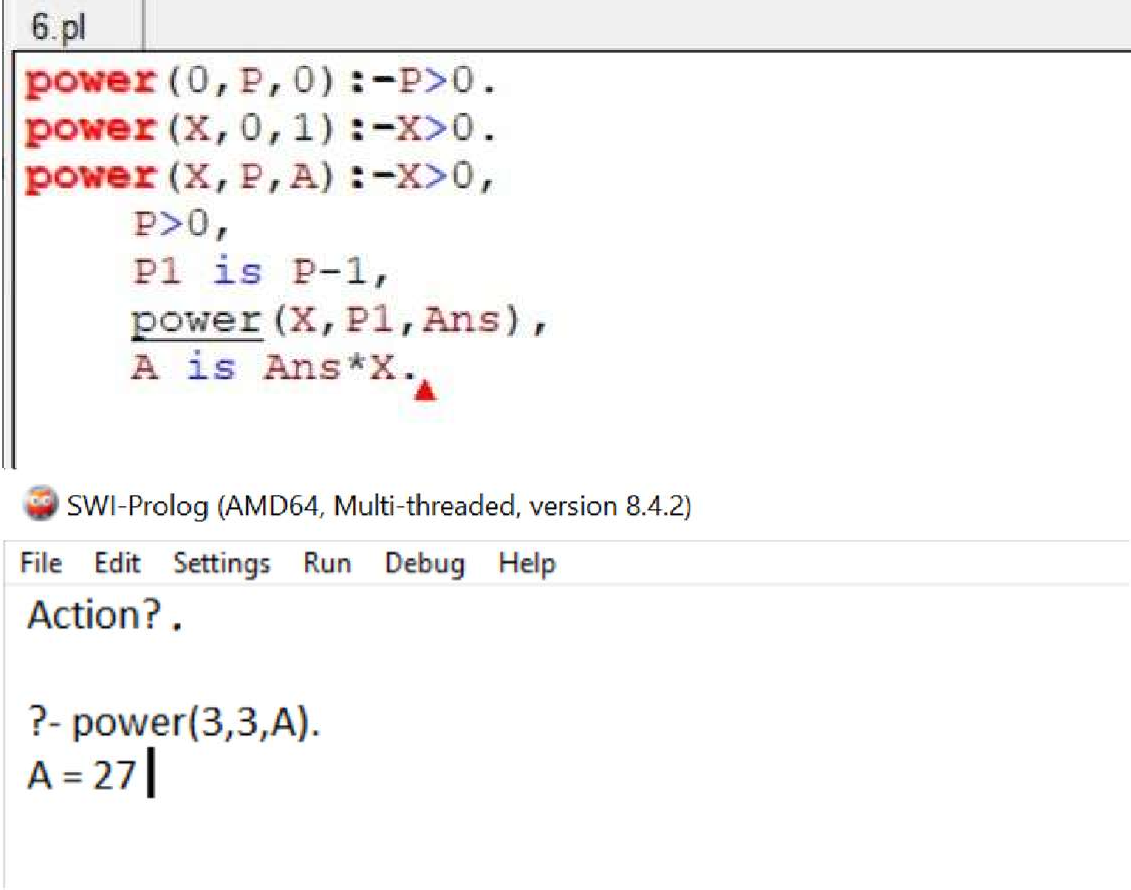




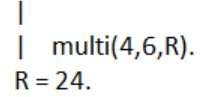
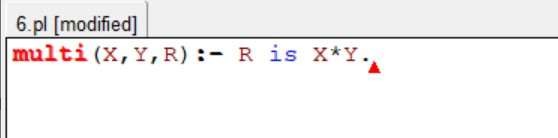
**Program 5: Write a Prolog program to implement GCD of two numbers.**



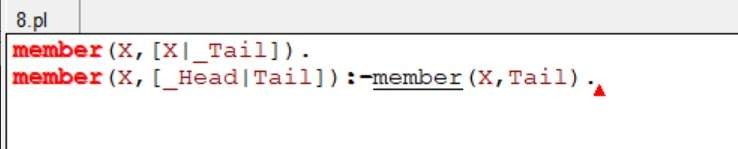
**Program 6: Write a Prolog program to implement power (Num,Pow, Ans) : where Num is raised to the power Pow to get Ans.**

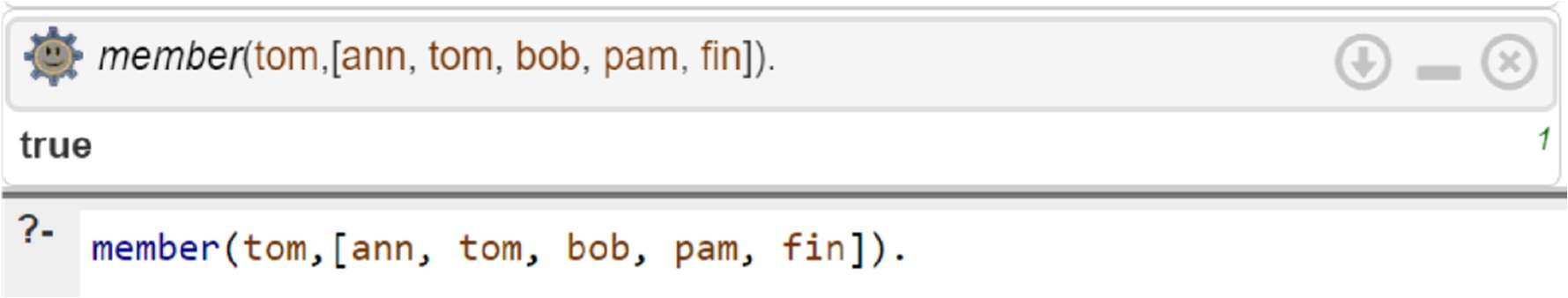


**Program 7: Prolog program to implement multi (N1, N2, R) : where N1 and N2 denotes the numbers to be multiplied and R represents the result.**

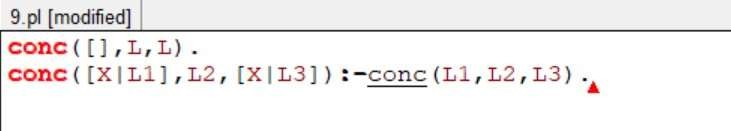


Question 8: Write a Prolog program to implement memb(X,L) : to check whether X is a member of L or not.



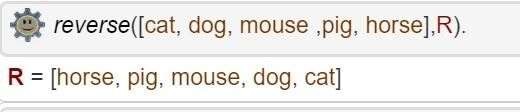
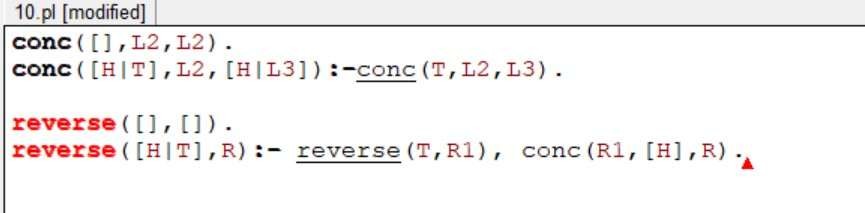


Question 9:- Write a Prolog program to implement conc(L1,L2,L3) where L2 is the list to be appended with L1 to get the resulted list L3.

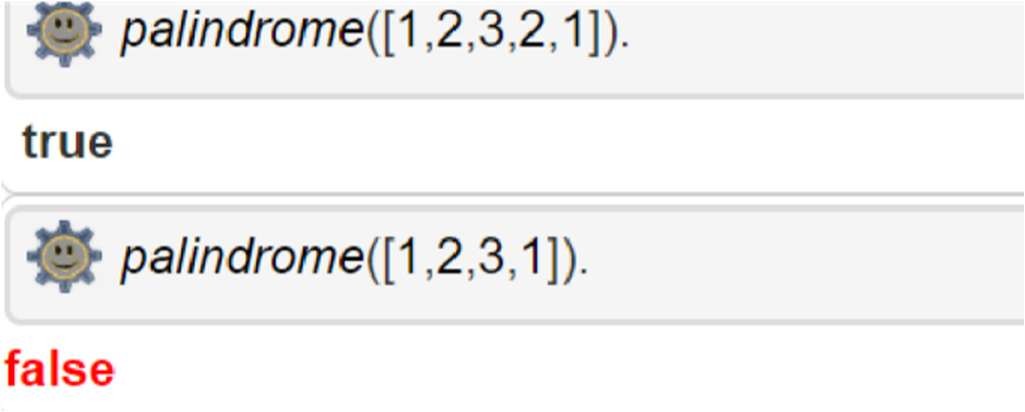
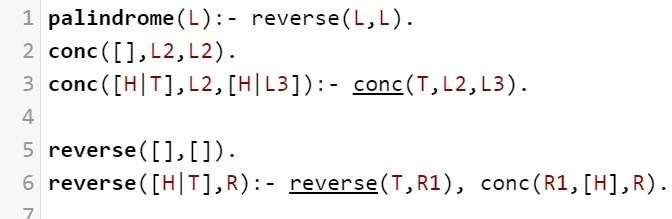




Question 10:- Write a Prolog program to implement reverse(L,R) where List L is original and List R is reversed list.



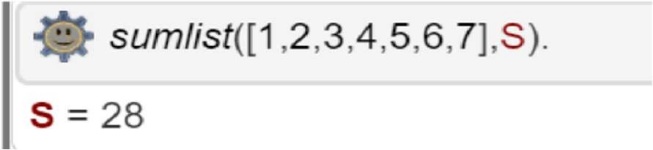
Question 11:- Write a program in PROLOG to implement palindrome(L) which checks whether a list L is palindrome or not.

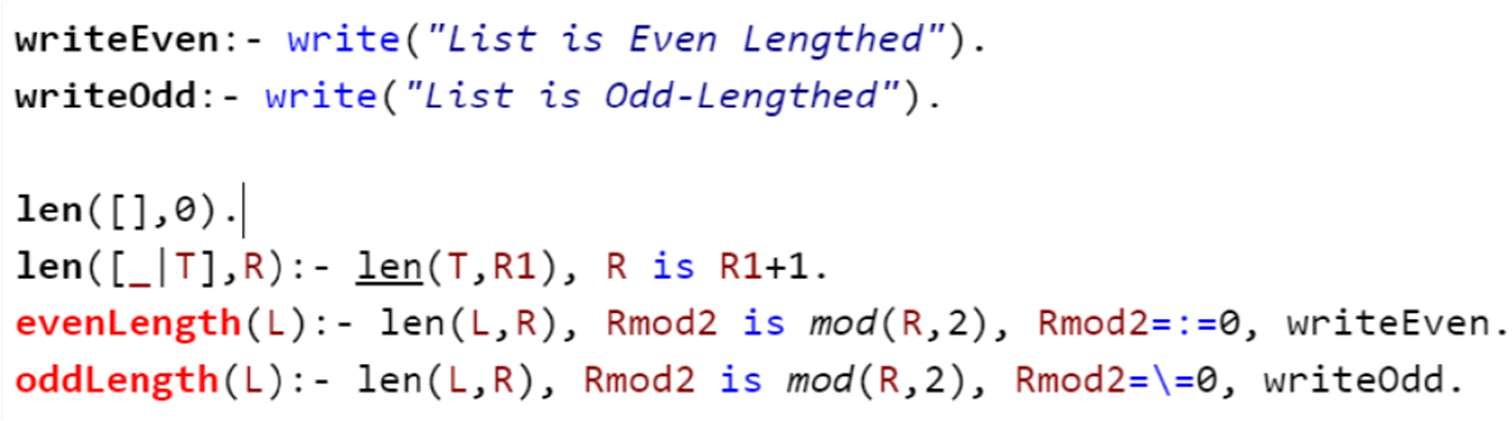


Question 12:- Write a Prolog program to implement sumlist(L,S) so that S is the sum of a given list L.



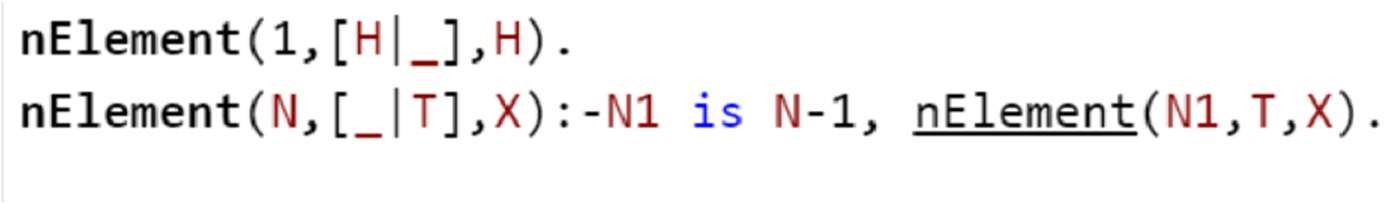
Question 13:- Write a Prolog program to implement two predicates evenlength(List) and oddLength(List) so that they are true if their argument is a list of even or odd length respectively.





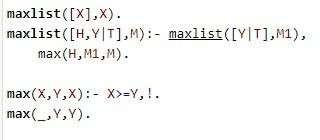


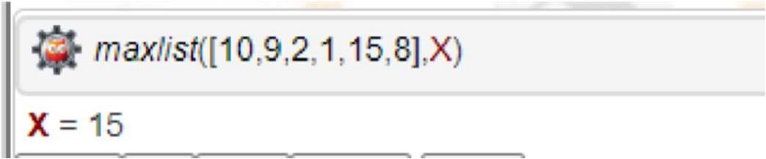
Question 14:- Write a Prolog program to implement nth\_element(N,L,X) where N is the desired position, L is a list and X represents the Nth element of L.



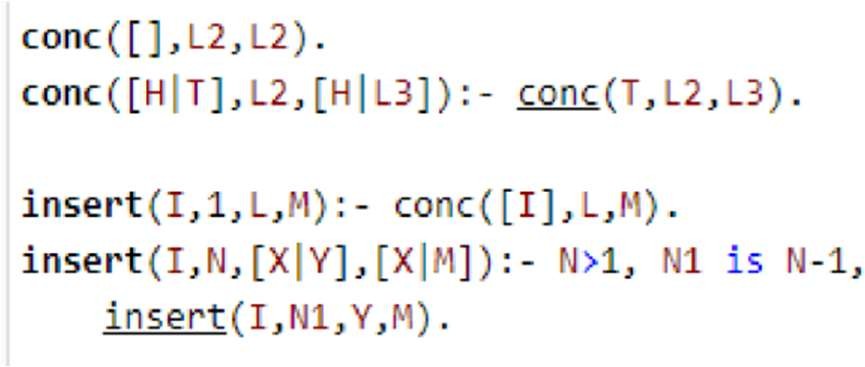


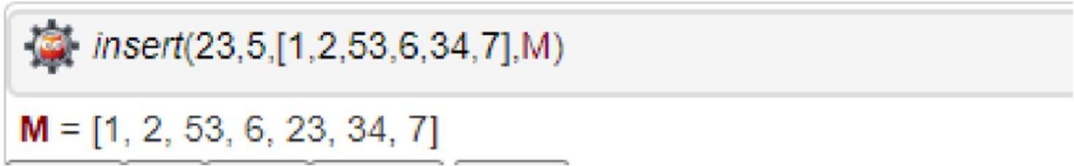
Question 15: Write a Prolog program to implement maxlist(L,M) so that M is the maximum number in the list.



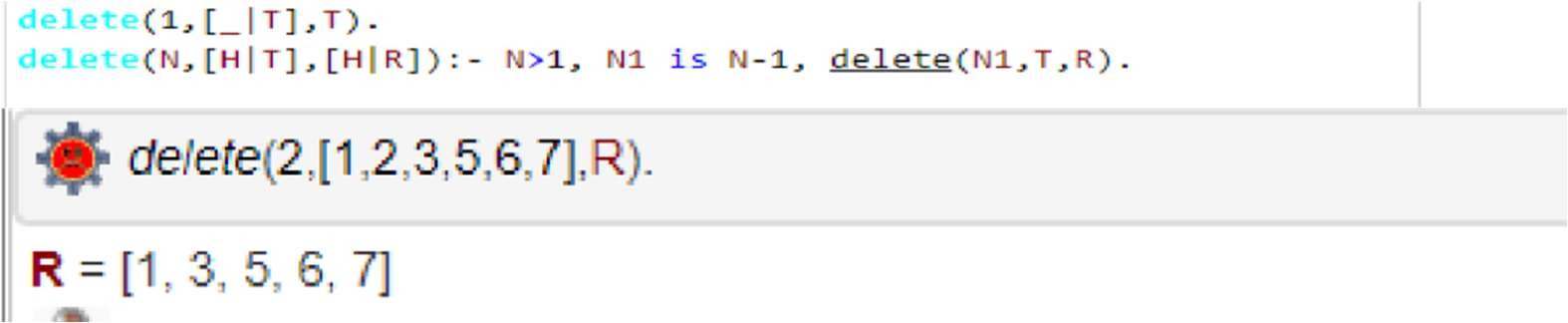


Question 16: Write a prolog program to implement insert\_nth(I,N,L,R) that inserts an item I into Nth position of list L to generate a list R.





Question 17: Write a Prolog program to implement delete\_nth(N,L,R) that removes the element on Nth position from a list L to generate a list R.



Question 18: Write a program in PROLOG to implement merge(L1, L2, L3) where L1 is first ordered list and L2 is second ordered list and L3 represents the merged list.

