**Q1.**

list\_subset([],[]).

list\_subset([Head | Tail], [Head | Subset]):-

list\_subset(Tail, Subset).

list\_subset([Head | Tail], Subset):-

list\_subset(Tail, Subset).

**Q2.**

palindrome(List):-list\_reverse(List, List).

list\_reverse([],[]).

list\_reverse([First | Rest], Revrsed):-

list\_reverse(Rest, ReversedRest), concatenation(ReversedRest, [First], Reversed).

concatenation([], L, L).

concatenation([X1 | L1], L2, [X1 | L3]):-

concatenation(L1, L2, L3).

**Q3.**