

## Lab Assignment 4

1. ?- max(3, 1, 1).  
yes

```
max(X, Y, Z) :- X >= Y, !, Z = X.  
max(X, Y, Y).
```

or

```
max(X, Y, Z) :- X >= Y, !.  
max(X, Y, Y) :- X < Y.
```

2. reverse([], R, R).  
reverse([H|T], R, L1) :-  
    reverse(T, [HIR], L1).

3. fac(0,1).  
fac(N,F) :-  
    N > 0,  
    fac(N,1,F).

```
fac(1, F, F).  
fac(N, PP, F) :-  
    N > 1,  
    NPp is N * PP,  
    M is N-1,  
    fac(M, NPp, F).
```