Consider the following incorrect Prolog program.

% factorial(N,M) holds when M=Nx(N-1)x...x2x1 (and when N=0 and M=1).
factorial(0,1).
factorial(N,F) :- N>0, factorial(N,F1), F is N*F1.

1. Does this program terminate? Answer: No. (It actually runs out of memory.)

2. Correct the second clause of the program so that it correctly computes the factorial. Answer:

   factorial(0,1).
factorial(N,F) :- N>0, N1 is N-1, factorial(N1,F1), F is N*F1.