Software Verification
Exercise: Hoare & Separation logic

Tasks:

1) Write a program which computes the factorial of an integer \( x \) and stores the result in variable \( y \). You may use helper variable(s) if needed. Prove the correctness of your algorithm.

2) Write a program that deletes the first node of a non-empty singly-linked list. Assume that the variable \( i \) points to the first node. It should also point to the remainder of the list after you deleted the node. Use helper variable(s) if needed, and prove your algorithm correct.