P1

Recursion is the process of a method calling itself. This may seem like a strange thing to do, but it is a way to implement the bottom-up approach to many common problems. Provide an example of a problem in which the solution would be using such a method. Ensure that the problem has multiple levels to utilize the recursion method in its solution.

Justify your answers with examples and reasoning.

P2

A pointer is a variable that may contain a memory cell address. The term pointer is used because memory cell addresses “point to” a location in which data values reside. Describe at least four pointer types and examples of their usage in a program to address a solution to a problem.

Justify your answers with examples and reasoning.