Algorithm

A set of well-defined and logical instructions to be followed to solve a specific problem, complete a certain task, or preform a computation. It can be used as part of a larger application to be part of the process of completing a larger task or be used separately. Examples include binary search, sorting algorithms (bucket sort, merge sort, bubble sort, etc.), or the invert binary tree algorithm.

https://cs.stackexchange.com/questions/38386/computer-program-vs-algorithm

Program

A set of well-defined and logical instructions **for a computer** to follow to solve a specific problem, complete a certain task, or preform a computation. A program is compiled such that the computer can understand the instructions whilst the scripts we write cannot be understood by the computer before being compiled.

https://cs.stackexchange.com/questions/38386/computer-program-vs-algorithm

Application Program

A computer program which is designed to complete a specific task separate and unique from the operation of the computer system. It is separate from programs used to control or communicate with the computer's physical hardware. Examples include Chrome, Vim, Word, or VSCode.

https://www.quora.com/What-is-the-difference-between-system-software-and-operating-systems

Operating System

A program/programs which manage basic services for computer programs and computer hardware. It is the basic software on a computer system which is used to control computer components and to communicate with them. Examples include Windows, MacOS, ChromeOS, or the Linux kernel.

https://www.quora.com/What-is-the-difference-between-system-software-and-operating-systems