

Show me examples of simple coding problems at the grade 6 level that can be abstracted into more complex algorithms.

1. Ask for the time elapsed between two marks on a marathon course.
2. Develop a program that takes an array of numbers as input and merges them in order from smallest to largest.
3. Build a program to evaluate an arithmetic expression and give the result.
4. Write a program to simulate a guessing game where the user has to guess a number between 1 and 10.
5. Create a program that determines the shortest route between two cities.
6. Develop a program that reads a text file and displays a list of all the words it contains, sorted in alphabetical order.
7. Write a program that creates a set of numbers in a sequence and determines the sum of each one.
8. Create a program to identify the first character of each word in a sentence.
9. Develop a program that counts how many times a given number appears in a list of integers.
10. Create a program that displays a histogram based on a list of numbers.