

## MODULE 1: INTRODUCTION TO PROGRAMMING IN C#

### CORE EXERCISES

#### Tutorial 2

2.1 Design and write a program that will allow the user to input two integer values which are to be stored in variables x and y. Your program should test these values and, if necessary rearrange them such that x contains the smallest value and y contains the largest. Your program should have suitable output to indicate the success of your ordering.

Hint: think of two trains on a single track of railway that need to pass each other. A siding is available for one train to temporarily move off the main track.

2.2 Design and write a simple program that invites the user to input a year date and to determine whether that year is a leap year according to the following rules:

If the year is divisible by 4 then it is a leap year unless it is divisible by 100 except when it is divisible by 400.

2.3 Design and write a program that will calculate the postal rate to send a package of a weight (to be input) according to the following rules for first-class post:

- Up to and including 1kg £5.70
- Up to and including 2kg £8.95
- Up to and including 5kg £15.85
- Up to and including 10kg £20.25
- Up to and including 20kg £33.40