

Exercise 03-Conditions and loops

1. Write a program that read x, y and z and checks if:
 - a. x, y and z contain different values
 - b. x, y and x do not contain equal values
 - c. at least two of them are the same
2. Write a program that read in the values a, b, and c and sorts them. Add an additional variable that decides if the values are sorted ascending or descending.
3. Read in the endpoints of two horizontal or vertical lines using their x and y end coordinates. Check then if the two lines intersect.
4. Write a program that reads a positive integer and determines how many numerals it contains. For example 12 -> 2 numerals.
5. Write a program that reads a positive integer value and prime decomposition. The integer 100 for example consists of the prime factors 2,2,5,5 and the integer 252 of the prime factors 2,2,3,3,7