# Homework 1 Programming Basics

# 1. Use Google to find the formula for converting pounds to kilos and kilos to pounds. Write a pseudocode algorithm that prompts the user to enter a kilo value and a pound value. The program will then convert the kilos to pounds and the pounds to kilos. It will then output both values. [4]

# 2. Write a pseudocode algorithm that prompts the user to enter a three-digit number and outputs the hundreds, tens and units.

# Example: 523 will output 5 hundreds, 2 tens and 3 units. Use what you learned about division. [6]

# 3. When validating a new password on a website the programmer might use a string function to determine its length.

#  (a) Why? [2]

 (b) Write a pseudocode statement to do this, using an appropriate function. [1]

# 4. When would you use a variable and when might you use a constant? [2]

[Total 15 marks]