Programming Exercise 5B

NOTE: All programs that you write must have comments at the top with 1) the program name, 2) your name, and 3) a sentence describing what the program does.

For all programs going forward, whenever you print something, make sure it has a label.

1. Create a program called **Program5B1** that will create and work with a dictionary structure.
   - Create a dictionary with a name (String) as the key and an age (Integer) as the value.
   - Fill the dictionary by reading the values in from a text file (**Lab5B1.txt**). Each line in the text file will have a name and an age.
   - Print the dictionary
   - Ask the user to enter a name and determine if that name is in the map. Print a statement to say if it is or not.
   - Ask the user for an age and count how many times that age appears in the map. Print the count with a label.
   - Read through the values and calculate the highest age in the group

2. Create a program called **Program5B2** that will validate variable names.
   - Read a set of words in from the text file, Lab5B2.txt, and put it into a tuple named reservedWords.
   - Print reservedWords
   - Ask the user to enter a variable name.
   - Loop through the characters in the variable name to make sure they are allowed. Remember that variable names can have letters, numbers or _.
   - Also, valid variable names cannot start with a number.
   - See if the variable name is in your reservedWords tuple. If so, it's invalid because variable names cannot be Python reserved words.
   - After looping through the variable name characters, print a statement to say if the name is valid or invalid. If it's invalid, state the reason why.

     (Hint: **letter.isalpha()** will return a true if the character is a letter and false otherwise.
     letter.isnumeric() will do the same for it being numeric.)