Introduction to Computer Science (ICS 3U)
Selective Structure Problem Set

Create programs which will solve the following problems. Save all of the files in a folder called **Selective**.

1. Write a program that asks the user to input the last name of the principal of the school. If the user inputs the correct last name, output "Correct", otherwise, output "Incorrect". Save your program as **Select1.py**

2. Write a program which will let the user input his/her mark in math class last year. If the person's mark was lower than yours, have the computer to output a message telling them they are had a lower mark. If it was higher, output a message stating it was higher. Finally, if it was the same, have the computer output an appropriate message. Save your program as **Select2.py**

3. Write a program that asks the user to input four integers, calculates the sum and outputs a message displaying whether the sum is positive, negative, or zero. Save your program as **Select3.py**

4. Write a program that asks the user to input two words and prints these words in alphabetical order. (Note that you should skip this program until you have done the assignment on ASCII values). Save your program as **Select4.py**

5. Create a program which displays a province and allows the user the to input the name of the capital of that province. The user will be presented with at least five of the ten provinces over the course of the game. The conclusion should display the number of correct and the number of incorrect answers. Suitable messages should also be displayed depending on the number of correct answers (ie. If they are perfect, output "You know your Canadian geography", etc.). Save your program as **Select5.py**

6. Write a program which will ask a person what mark they got in there EQAO math test in Grade 9. If they had a mark of 80 or over, have the computer congratulate them and tell them they had an honours mark. If they had a mark of between 60 and 79.9, tell them they did well. If they had a mark of between 50 and 59.9, tell them they must work harder in math. If the mark was less than 50, tell them that they failed and tell them how many more marks they need to pass the test (ex. if they got 45, they would need 5 marks to pass).Save your program as **Select6.py**

7. Enter a maximum and minimum integer value that could be used in A HIGH LOW GAME. The computer selects a number in the range. The user attempts to guess the number selected by the computer. After the guess the computer displays TOO HIGH or TOO LOW or RIGHT ON depending on the guess. Save your program as **Select7.py**

   Hint: You will have to use the random number generator - look it up using the Python help function or the internet.