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**CPSC165**

**Assignment#3a**

**30 Points**

The purpose of this assignment is to practice with the Selection Sort, Sequential Search and Binary Search we discussed in class. There are three files in the announcement. Each file is described below. You will want to download these files to use them in a new Eclipse project.

**Download File: presidents12.txt**

This file consists of information that has been stored for a dozen presidents. The file is to serve as an input file for this assignment. The information for each of the twelve presidents has been stored on a separate input line as follows:

President Number (integer)

President Name (string)

President Birthdate (string)

Number of terms served to date (integer)

**Download File: President.java**

This file defines a president object.

**Download File: MainForSortSearch.java**

This is the main program. It calls the methods that you will define in the Presidents.java file

**You** are codingthe **Presidents.java** file

So it is your task to code the Presidents.java file contents. You will need to code:

* an array of President objects and a counter
* loadArray: this method loads the array with the president information stored in presidents12.txt  
  You may assume that there will be no more than 12 presidents in the array
* print: this method will print the array information. Note that a printInfo has been coded in the President.java file that you are downloading
* SelectionSortNums: this method sorts the array in ascending order of president numbers.
* SelectionSortTermsSoFar: this method sorts the array in ascending order of president terms served so far using the SelectionSort code.
* SequentialSearchNums: this method utilizes an **efficient** sequential search to find and return the name of the president with the number that has been passed as a parameter to this method.
* BinarySearchNums: this method utilizes a binary search to find and return the name of the president with the number that has been passed as a parameter to this method.

**Upload your source code and output file to Canvas**