**Exam Four: the election**

**Outcome:**

* **Student will demonstrate all core competencies from this class:**
  + **Design**
  + **Variables**
  + **Decision**
  + **Error Checking**
  + **Looping**
  + **Functions**
  + **Arrays**

**Program Specifications:**

Let’s pretend that we are tracking votes for the next presidential election. There will be two candidates: Ivanka Trump and Michele Obama. You can assume that there are fifty states casting votes. You will do not need to deal with the names of the states, you can assume that state 0 = the first state and state 49 = the last state.

This program will have menu system. The menu will at least have the following options:

* Enter Votes from a state for Ivanka Trump
* Enter Votes from a state for Michele Obama
* Display total votes for each candidate
* Display the all votes for a selected candidate in order
* List the state number(s) where Trump and Obama received the exact same number of votes
* For each candidate display the highest number of votes from any state, the lowest number of votes from any state, the average number of votes from all states.
* Election is over, Exit Program

**Submission Requirements:**

Your source code must have a comment header and comments within the code. If you name is not in the comments, you will receive 0 points for this exam. You must provide a well written design tool that matches the code and was generated by a computer application. You must do error checking in at least 2 places within the code. You must have a bubble sort and some type of search function. Everything must be written in functions. Main can only have variables, a loop and a switch.

You must place your design tool in the src folder. You must use Windows compress. You must upload your zipped document to the exam thread.

**YOU CANNOT:**

* **Use global variables**
* **Use the word goto**
* **Use the break command outside a case statement**
* **Use POINTERS, this is an advanced concept taught in C**
* **Use a 2D array, this is an advanced concept taught in C**