# Final Project – Part B

A **CandidateType** defines a candidate that runs for the presidential election of the student government. There are four community college campuses participating the election process. Each campus manages its own voting process.

You will need to implement the **CandidateType** class that **inherits** from the PersonType class.

Since the **CandiateType inherits** from the **PersonType** class, **MAKE SURE** you implement your code **efficiently** by -**re-suing** the functions that are already available in the **PersonType**.

| **CandiateType** class | |
|---|---|
| Global constant | Declare **a global constant integer**, right before the class definition, to store the number of participating campuses.<br><br>Name your constant: **NUM_OF_CAMPUSES** |
| Member variables | An **integer** that stores the total number of votes<br>An **array** of **integers** that has capacity of **NUM_Of_CAMPUSES**.<br><br>The campuses will be labeled by numbers (i.e., Santiago Canyon College = 1, Santa Ana College = 2, and so on) where one corresponds to index 0 of the array, 2 corresponds to index 1 of the array, etc. |
| **Default constructor** | Initializes the total number of votes to 0<br>Initializes all the array elements to 0. |
| Function **updateVotesByCampus** | **Parameters**: The Campus number and the number of votes for that campus.<br>Updates the total number of votes and the number of votes for the campus specified |
| Function: **getTotalVotes** | Return the total number of votes |
| Function: **getVotesByCampus** | **Parameter**: The Campus number.<br>Returns the votes for the specified Campus. |
| Function: **printCandidateInfo** | Prints information about the candidate in the following format:<br><br>**###-##-#### - lName, fName**<br><br>Note: the "#" should be replaced with integers. |

| | |
|---|---|
| Function:<br>**printCandidateTotalVotes** | Prints the candidate's total votes in the following format:<br><br>**Lastname, Firstname**<br>⇨ **Total Votes ( all campuses) : ##**<br><br>Note that "#" should be replaced with an integer. |
| Function<br>**printCandidateCampusVotes** | Parameters: The Campus number.<br>Prints the candidate's vote for the specified Campus:<br><br>**Lastname, Firstname**<br>⇨ **Campus # total votes: ##**<br>Note that "#" should be replaced with an integer. |
| **Destructor** | (empty) |

Make Sure you consider when to:

- Pass by **reference**
- Use a **const** modifier for your parameter
- Use a **const** modifier for your function

Create a **Main.cpp** file to test your functions.

Start writing every class you write in Unified Modeling Language ( **UML)**. Please do your own research if you need information on topics not covered in class.

**By you end of Part B of the project, you must have part A, Part B completed including UML for all the classes used.**