

Project 1 (Part B) – CandidateType Class

From now on, if you are a member of a team, you will **need to work with your team members**.

A **CandidateType** defines a candidate that runs for the presidential election of the student council at your college. Your college has four major divisions, and each division manages its own voting process. You will need to implement the **CandidateType** class that **inherits** from the **PersonType** class.

NOTE: The **CandidateType** class **inherits** from the **PersonType** class; therefore, **MAKE SURE** you implement your code **efficiently** by re-using the functions that are already available in the **PersonType**.

Requirements:

- Declare a **global constant integer**, right *before* the class definition, to store the number of divisions, 4.
 - Name your constant: **NUM_OF_DIVISIONS**
- **Member variables**
 - An **integer** that stores the total number of votes.
 - An **array of integers** that has capacity **NUM_OF_DIVISIONS**.
 - The division will be labeled by numbers (i.e., Computer Science = 0, Mathematics = 1, and so on), which will correspond to the indices of the array.
- **Default constructor**
 - Initializes the total number of votes to 0.
 - Initializes the all array elements to 0.
- Function **updateVotesByDivision()**
 - **Parameters:** The division number and the number of votes for that division.
 - Updates the total number of votes.
 - Updates the number of votes for the division specified.
- Function **getTotalVotes()**
 - Returns the total number of votes.
- Function **getVotesByDivision()**
 - **Parameter:** The division number.
 - Returns the votes for the specified division.
- Function **printCandidateInfo()**
 - Prints information about the candidate in the following format:

###-##-#### – Lastname, Firstname

- Function **printCandidateTotalVotes()**
 - Prints the candidate's total votes in the following format:
Lastname, Firstname
Total Votes (all divisions): ##
- Function **printCandidateDivisionVotes()**
 - **Parameters:** The division number.
 - Prints the candidate's votes for the specified division:
Lastname, Firstname
Division # total votes: ##
- **Destructor**
 - (empty)

Add a **Main.cpp** file to **test** all your functions.

Do not forget to:

- Pass by **reference**
 - Use a **const** modifier for your parameter, if needed.
- Use a **const** modifier for your function, if needed.

→ No need to turn in this part of the project.