ID Number: 620140671

Course Code: COMP2190

Date: December 4, 2021

Program Description for Problem 3

The program works by prompting the user to enter a clerk ID, constituency ID, polling division ID, polling station code, candidate 1 votes, candidate 2 votes, rejected ballots and total votes. The program does not accept any null entry and has specific criteria for the entries. The IDs must be integers, the polling station code can only be a capital letter, integer or a combination of the two, the votes fields must be of type integer and the total votes field must be equal to the sum of all the other votes fields. If any unwanted entry is entered, the field will be highlighted in red, and the information will not be sent into the database. Once all the entries have been validated, the data will be entered into a table in a database and this table will be displayed to the user.

To improve the user’s experience, the code displays the totals for all the votes columns in the database in a line beneath the table, like in problem 1-b for easy data collection. However, the program could have excluded the total votes column completely and calculated this for the user.

Some possible improvements to the code could include storing the number of persons who voted in each constituency, at each polling station and polling division in separate tables for the relevant users to access when data is needed on these things individually.

Buttons could be added to the page to get the total number of votes allotted to each of these things. This can be illustrated by the diagram below:

Diagram

Description automatically generated