

# Reflection Log - Election (Mastery)

To begin I have added all the necessary components to allow for user input and a value rounded to 2 decimal places.

```
package Mastery;

import java.text.DecimalFormat;
import java.util.Scanner;

public class ElectionMastery
{
    public static void main(String[] args)
    {
        Scanner userInput = new Scanner(System.in);

        DecimalFormat deca = new DecimalFormat("#.##");
```

I have now used my import user input statement from earlier and used it to gather user input about each election result variable needed. Now I have each variable I need to begin calculating and displaying output.

```
System.out.print("How many votes did Awbrey get in New York this election? ");
int Awbrey_NY = userInput.nextInt();

System.out.print("How many votes did Martinez get in New York this election? ");
int Martinez_NY = userInput.nextInt();

System.out.println(" ");

System.out.print("How many votes did Awbrey get in New Jersey this election? ");
int Awbrey_NJ = userInput.nextInt();

System.out.print("How many votes did Awbrey get in New Jersey this election? ");
int Martinez_NJ = userInput.nextInt();

System.out.println(" ");

System.out.print("How many votes did Awbrey get in Connecticut this election? ");
int Awbrey_Con = userInput.nextInt();

System.out.print("How many votes did Awbrey get in Connecticut this election? ");
int Martinez_Con = userInput.nextInt();
```

To continue the code, now I have printed part of the output displaying the votes for the election. Next I will use these results and display the percentage of votes given to each individual.

```
System.out.println(" ");

System.out.println("Election Results for New York: ");
System.out.println("Ambrey: " + Ambrey_NY);
System.out.println("Martinez: " + Martinez_NY);
System.out.println(" ");

System.out.println("Election Results for New Jersey: ");
System.out.println("Ambrey: " + Ambrey_NJ);
System.out.println("Martinez: " + Martinez_NJ);
System.out.println(" ");

System.out.println("Election Results for New York: ");
System.out.println("Ambrey: " + Ambrey_Con);
System.out.println("Martinez: " + Martinez_Con);
System.out.println(" ");

}
```

To finish the code off, I calculated each candidate's total votes and the total amount of votes of both candidates combined. I calculate the percentage of votes by doing the total vote for one of the candidates and then dividing by total votes. During this calculation I cast them as a double to get a decimal value and then used that to get percent by multiplying by 100. After that I just displayed each value in the table and used my earlier defined **decimal format** to get the percentage value to 2 decimal places.

```
int Ambrey_T = Ambrey_NY + Ambrey_NJ + Ambrey_Con;
int Martinez_T = Martinez_NY + Martinez_NJ + Martinez_Con;
int Total_V = Ambrey_T + Martinez_T;

double Ambrey_Percentage = (double)Ambrey_T / (double>Total_V;
double Martinez_Percentage = (double)Martinez_T / (double>Total_V;

Martinez_Percentage *= 100;
Ambrey_Percentage *= 100;
```

```
System.out.println("Candidate      Votes      Percentage ");
System.out.println("Ambrey:      " + Ambrey_T + "      " + deca.format(Ambrey_Percentage) + "%");
System.out.println("Martinez:    " + Martinez_T + "      " + deca.format(Martinez_Percentage) + "%");
System.out.println("TOTAL VOTES:  " + Total_V);
```