

GROUP MEMBERS:

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PPS MINI PROJECT

TOPIC: VOTING MACHINE

CODE:

```
#include<stdio.h>

#define CANDIDATE_COUNT

#define CANDIDATE1 "Archie's ice cream"
#define CANDIDATE2 "Arya the magician"
#define CANDIDATE3 "Topper Prats"
#define CANDIDATE4 "Pappu"

int votesCount1 = 0, votesCount2 = 0, votesCount3 = 0, votesCount4 =
    0 ,spoiledtvotes = 0;

void
castVote ()
{
    int choice;

    printf ("\n\n ### Please choose your Candidate ####\n\n");

    printf ("\n 1. %s", CANDIDATE1);
```

```
printf ("\n 2. %s", CANDIDATE2);

printf ("\n 3. %s", CANDIDATE3);

printf ("\n 4. %s", CANDIDATE4);

printf ("\n 5. %s", "None of the above maha(purushes/mahila)");

printf ("\n\n Input your choice (1 - 5) : ");

scanf ("%d", &choice);

switch (choice)
{

    case 1:
        votesCount1++;
        break;

    case 2:
        votesCount2++;
        break;

    case 3:
        votesCount3++;
        break;

    case 4:
        votesCount4++;
        break;

    case 5:
        spoiledtvotes++;
        break;

    default:
        printf ("\n Error: Wrong Choice !! Please retry");

        //hold the screen
        getchar ();

}

printf ("\n thanks for vote !!");

}
```

```

void
votesCount ()
{

    printf ("\n\n ##### Voting Statics ####");

    printf ("\n %s - %d ", CANDIDATE1, votesCount1);

    printf ("\n %s - %d ", CANDIDATE2, votesCount2);

    printf ("\n %s - %d ", CANDIDATE3, votesCount3);

    printf ("\n %s - %d ", CANDIDATE4, votesCount4);

    printf ("\n %s - %d ", "Spoiled Votes", spoiledtvotes);
    getchar ();

}

void
getLeadingCandidate ()
{

    printf ("\n\n ##### Leading Candiate ####\n\n");

    if (votesCount1 > votesCount2 && votesCount1 > votesCount3
        && votesCount1 > votesCount4)

        printf ("%s", CANDIDATE1);

    else if (votesCount2 > votesCount3 && votesCount2 > votesCount4
        && votesCount2 > votesCount1)

        printf ("%s", CANDIDATE2);

    else if (votesCount3 > votesCount4 && votesCount3 > votesCount2
        && votesCount3 > votesCount1)

        printf ("%s", CANDIDATE3);

    else if (votesCount4 > votesCount1 && votesCount4 > votesCount2
        && votesCount4 > votesCount3)

        printf ("%s", CANDIDATE4);

```

```
else

    printf ("----- Warning !!! No-win situation-----");

}

int
main ()
{

    int i;

    int choice;

    do
    {

        printf ("\n\n ##### Welcome to SRM Election/Voting 2022 #####");

        printf ("\n\n 1. Cast the Vote");

        printf ("\n 2. Find Vote Count");

        printf ("\n 3. Find leading Candidate");

        printf ("\n 0. Exit");

        printf ("\n\n Please enter your choice : ");

        scanf ("%d", &choice);

        switch (choice)

        {

        case 1:
            castVote ();
            break;

        case 2:
            votesCount ();
```

```

        break;

    case 3:
        getLeadingCandidate ();
        break;

    default:
        printf ("\n ##### Thanks for using our voting code #####");

    }

    }
    while (choice != 0);

//hold the screen
    getchar ();
    return 0;

}

```

EXPLANATION:

In the above code first we have defined four variables candidate 1, candidate 2, candidate 3, candidate 4 named as Archie's ice cream, Arya the magician , Topper prats and Pappu. Then we have initialised vote , count1, count2, count3, count4 and spoiled votes as 0.

Then we have declared a void function named CastVote and in its definition we have printed the name of the candidates which we have defined before.

Then we have made a switchcase() construct where we will ask from user to cast vote and a default statement is given which will throw error if wrong numeric values is entered (i.e. greater than 5).

Then we have declared another void function named as "VotesCount" and in this function definition we have calculated how many votes each candidate has got.

Then we have declared another void function named as "getLeadingCandidate" to find the leading candidate. In this function we have used nested if-else to find the leading candidate.

Then inside main function we have used do while loop in which we will ask user to find whether he wants to cast vote, VoteCount or find leading candidate. Then inside do we have used switchcase to make choice for the user. If he/she presses one then it will acts vote for the particular candidate and so on and a default case is also given which prints "Thanks for using our voting code" and end the loop.