

Voting and counting system

#c program mini project

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: Programming for Problem Solving

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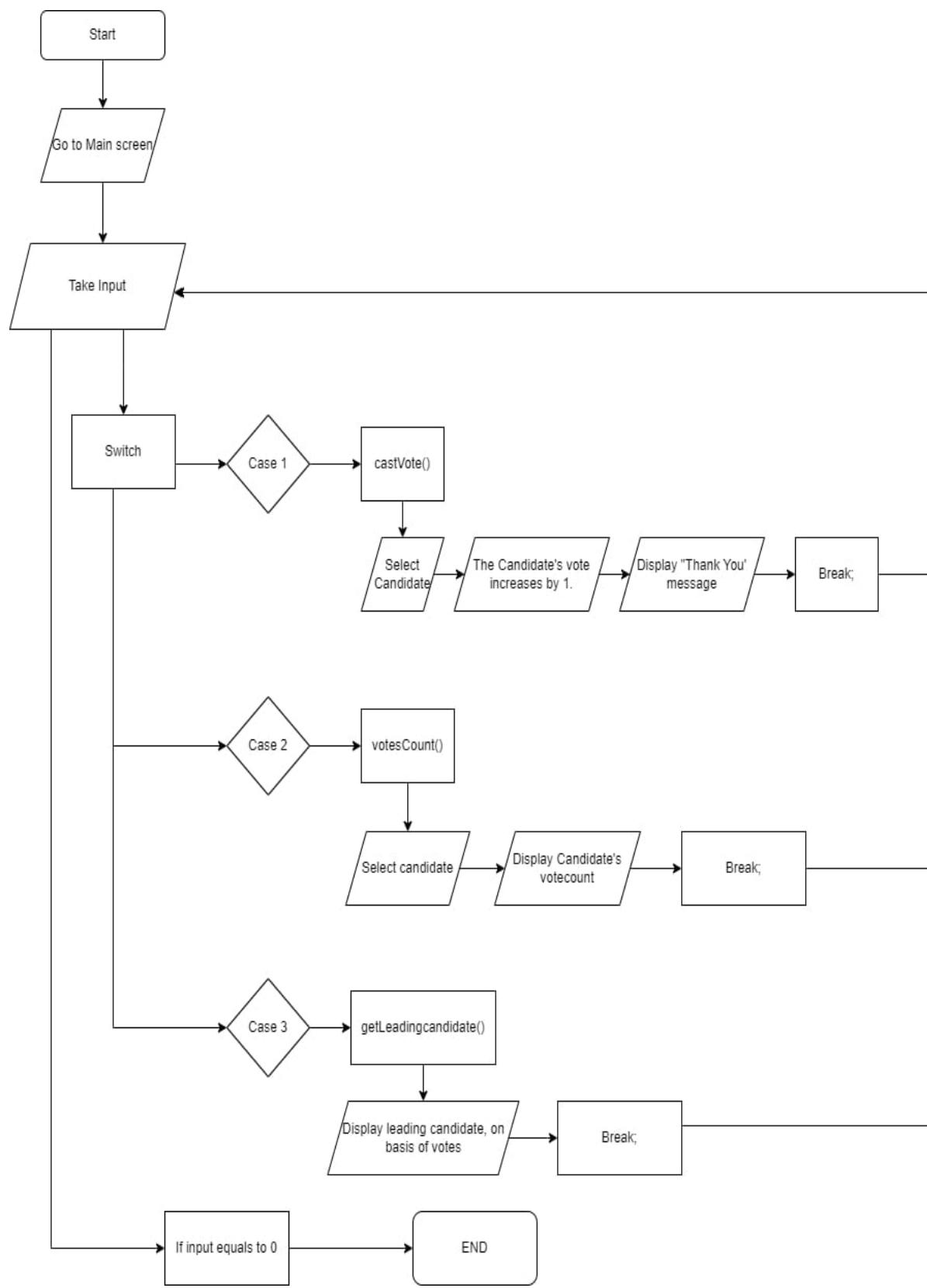
Aim:- To create a voting and polling system which allows easy elections and declares the winner and the name of the party as well as the number of seats or votes .

Abstract: - This project is compiled on c programming language and it offers fast and reliable voting and counting system. the first line of output mentions the name of all the candidates along with their respective parties. The program enables the users to abstract information like leading candidates, vote count and many other essential details.

Algorithm: -

- 1) define all the variables used in the program ie. The names of the candidates along with the name of parties .
- 2)create an integer type for vote count .
- 3)display opening window using printf with names of all candidates .
- 4) take input from the user from the above options
- 5)the choice of the user will be saved and reflected in the chosen candidate by switch case .
- 6) vote count to be accessed through menu after voting which will display the name of the candidate along with number of votes .
- 7) leading candidate will be displayed using the get function
- 8) starting window to have options to retrieve whichever data is required such as :-
 - 8.1)cast vote
 - 8.2)votes count
 - 8.3) leading candidate
 - 8.4) exit program
- 9) display error when the input doesn't match the required data type or given conditions .
- 10) exit the program.

Flow chart: -



Source code: -

```
#include<stdio.h>

#define CANDIDATE_COUNT

#define CANDIDATE1 "BJP"
#define CANDIDATE2 "AAP"
#define CANDIDATE3 "INC"
#define CANDIDATE4 "BSP"

int votesCount1=0, votesCount2=0, votesCount3=0,
votesCount4=0, spoiledVotes=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 These");

printf("\n\n Input your choice (1 - 4) : ");

scanf("%d",&choice);

switch(choice){

    case 1: votesCount1++; break;

    case 2: votesCount2++; break;

    case 3: votesCount3++; break;

    case 4: votesCount4++; break;

    case 5: spoiledvotes++; 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", spoiledVotes);
}

void getLeadingCandidate(){
    printf("\n\n ##### Leading Candidate #####\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 Election/Voting 2021  
#####");  
        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 Error: Invalid Choice");
}

}while(choice!=0);

//hold the screen
getchar();

return 0;
}
```

Outputs:-

Home screen:

```
##### Welcome to Election/Voting 2021 #####
```

- 1. Cast the Vote
- 2. Find Vote Count
- 3. Find leading Candidate
- 0. Exit

```
Please enter your choice : █
```

Cast vote:

```
##### Welcome to Election/Voting 2021 #####
```

- 1. Cast the Vote
- 2. Find Vote Count
- 3. Find leading Candidate
- 0. Exit

```
Please enter your choice : 1
```

```
### Please choose your Candidate ###
```

- 1. BJP
- 2. AAP
- 3. INC
- 4. BSP
- 5. None of These

```
Input your choice (1 - 4) :
```

choice of candidate :

Welcome to Election/Voting 2021

- 1. Cast the Vote
- 2. Find Vote Count
- 3. Find leading Candidate
- 0. Exit

Please enter your choice : 1

Please choose your Candidate

- 1. BJP
- 2. AAP
- 3. INC
- 4. BSP
- 5. None of These

Input your choice (1 - 4) : 1

voting:

Please choose your Candidate

- 1. BJP
- 2. AAP
- 3. INC
- 4. BSP
- 5. None of These

Input your choice (1 - 4) : 4

thanks for vote !!

Vote count function:

```
##### Welcome to Election/Voting 2021 #####
1. Cast the Vote
2. Find Vote Count
3. Find leading Candidate
0. Exit

Please enter your choice : 2

##### Voting Statics #####
BJP - 1
AAP - 3
INC - 1
BSP - 1
Spoiled Votes - 0
```

Leading candidate:

```
##### Welcome to Election/Voting 2021 #####
1. Cast the Vote
2. Find Vote Count
3. Find leading Candidate
0. Exit

Please enter your choice : 3

#### Leading Candiate ####

[AAP]
```

Result:

The voting and polling program is a great and helpful development that enables citizens and voters easy access to important information and voting through a simple and accessible interface.

Conclusion:

At the end of this mini project work we have learnt the use of many different functions and deepen our knowledge about the application as well as the theory of #C programming. We also discovered about how data flows and is processed through the help of various functions.
