

## **Programming for Problem Solving**

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**Aim:**

To create a project on election to cast vote to the candidates mentioned in the list.

**Source Code:**

```
#include<stdio.h>
```

```
#define CANDIDATE_COUNT
```

```
#define CANDIDATE1 "Nithish"
```

```
#define CANDIDATE2 "Aryan Dev"
```

```
#define CANDIDATE3 "Sreelekshmy"
```

```
#define CANDIDATE4 "Sai"
```

```
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 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: 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);  
}
```

```
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 Election/Voting 2022 #####");
```

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

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

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

```
printf("\n\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;  
}
```

Output:

```
##### Welcome to Election/Voting 2022 #####
```

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

Please enter your choice : 1

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

1. Nihtish
2. Aryan Dev
3. Sreelekshmy
4. Sai
5. None of These

Input your choice (1 - 4) : 1

thanks for vote !!

```
##### Welcome to Election/Voting 2022 #####
```

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

Please enter your choice : 2

```
##### Voting Statics #####
```

Nihtish - 1

Aryan Dev - 0

Sreelekshmy - 0

Sai - 0

Spoiled Votes - 0

```
##### Welcome to Election/Voting 2022 #####
```

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

Please enter your choice : 3

```
#### Leading Candiate ####
```

[Nihtish]

```
##### Welcome to Election/Voting 2022 #####
```

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

Please enter your choice : 0

Error: Invalid Choice