//collage voting system

#include<stdio.h>

int totalsymbol=6;

int noofcandidates;

int choice;

int winnervots;

char winnername[100];

int max=0;

//predefined symbol

int computer=0;

int ardino=0;

int transformer=0;

int robot=0;

int gas=0;

int dna=0;

//max only 6 candidates are allowed in voting system

struct candidate{

char name[100];//here max length of name is 90 letters

int year;//present year student is studying

int symbol;

int countc;

countc=0;

struct candidate \*next;

};

struct candidate \* head;

head=NULL;

//checking whether candidate are sufficient or not

int checkcandidates(int x){

if(x>totalsymbol){

printf("There are only limited no of positions, so please choose atmost 6 candidates for election process\n");

scanf("%d",&noofcandidates);

return noofcandidates;

}

return 0;

}

//this function is for checking symbol it means if any other candidate has selected this symbol or not

void checksymbol(int x){

if(x==1){

if(computer==0)

computer=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

else if(x==2){

if(ardino==0)

ardino=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

else if(x==3){

if(transformer==0)

transformer=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

else if(x==4){

if(robot==0)

robot=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

else if(x==5){

if(gas==0)

gas=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

else{

if(dna==0)

dna=1;

else{

printf("the candidate symbol which you had choosed has been selected by other canidate pls select other symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

}

}

}

void create(int j){

struct candidate \*x=(struct candidate\*)malloc(sizeof(struct candidate));

struct candidate \*temp1;

temp1=head;

printf("Enter the name of the candidate\n");

scanf("%s",x->name);

printf("Enter the candidate present studying year\n");

scanf("%d",x->year);

printf("choose the candidate symbol\n");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&choice);

checksymbol(choice);

x->symbol=choice;

if(j==0){

head=x;

head->next=NULL;

temp1=head;

}

else{

if(temp1>next!=NULL)

temp1=temp1->next;

temp1->next=NULL;

}

}

void votingfunc(int x){

struct candidate \*tt;

tt=head;

if(x==1){

tt->countcandidate+=1;

}

else if(x==2){

tt->next->countcandidate+=1;

}

else if(x==3)

tt->next->next->countcandidate+=1;

else if(x==4)

tt->next->next->next->countcandidate+=1;

else if(x==5)

tt->next->next->next->next->countcandidate+=1;

else

tt->next->next->next->next->next->countcandidate+=1;

}

void checkmajority(int a){

struct candidate \*tt;

tt=head;

if(a==1){

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

}

}

if(a==2){

tt=tt->next;

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

} }

if(a==3){

tt=tt->next->next;

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

}

}

if(a==4){

tt=tt->next->next->next;

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

}

}

if(a==5){

tt=tt->next->next->next->next;

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

}

}

else{

tt=tt->next->next->next->next->next;

if(tt->countcandidate>=max)

{

max=tt->countcandidate;

winnervots=max;

int v=0;

for(;v<strlen(tt->name);v++)

scanf("%c",winnername[v]);

}

}

}

int main(void){

//orginal function

int noofvotes,i;

printf("Enter total number of students in the campus eligible for voting \n");

scanf("%d",&noofvotes);

printf("Enter number of persons who are willing to be as a leader\n");

scanf("%d",&noofcandidates);

int temp=checkcandidates(noofcandidates);

for(i=0;i<noofcandidates;i++){

create(i); //structure of candidates are created

}

int basevote;

basevote=noofvotes/3;

int orginalvoting=0,int c=0;

for(i=0;i<noofvotes;i++){

printf("Enter the candidate symbol whom you want to vote");

printf("1 = computer \n 2 = ardino \n 3 = transformer \n 4 = robot \n 5 = gas \n 6 = dna");

scanf("%d",&orginalvoting);

c++;

votingfunc(orginalvoting);

}

for(i=1;i<noofcandidates;i++){

checkmajority(i);

}

printf("max votes are %d",winnervots);

printf("\n name of the winner is : %s",winnername);

return 0;

}