Problem Statement

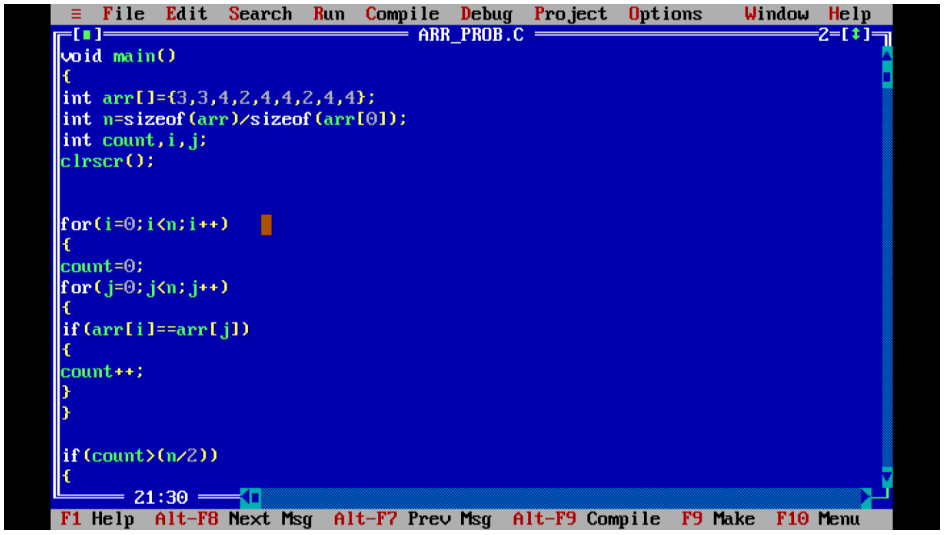
Find the Majority Element in an Array Write a program to find the majority element in an array (an element that appears more than n/2 times). For example, in the array [3, 3, 4, 2, 4, 4, 2, 4, 4], the output should be 4. Do not use any built-in functions for array manipulation or counting. Instructions: Implement a manual count and comparison logic to find the majority element.

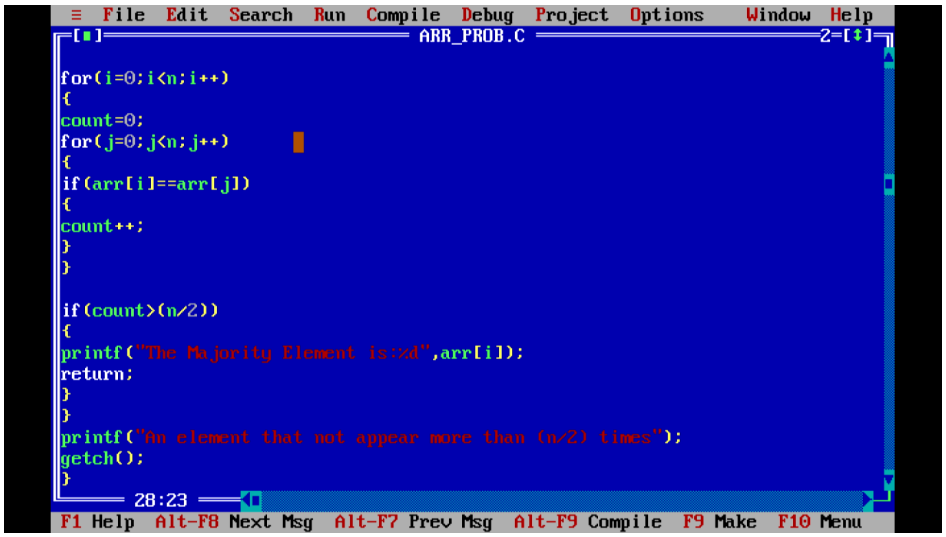
Problem Code

```
void main()
{
int arr[]={3,3,4,2,4,4,2,4,4};
int n=sizeof(arr)/sizeof(arr[0]);
int count,i,j;
clrscr();


for(i=0;i<n;i++)
{
count=0;
for(j=0;j<n;j++)
{
if(arr[i]==arr[j])
{
count++;
}
}

if(count>(n/2))
{
printf("The Majority Element is:%d",arr[i]);
return;
}
}
printf("An element that not appear more than (n/2) times");
getch();
}
```

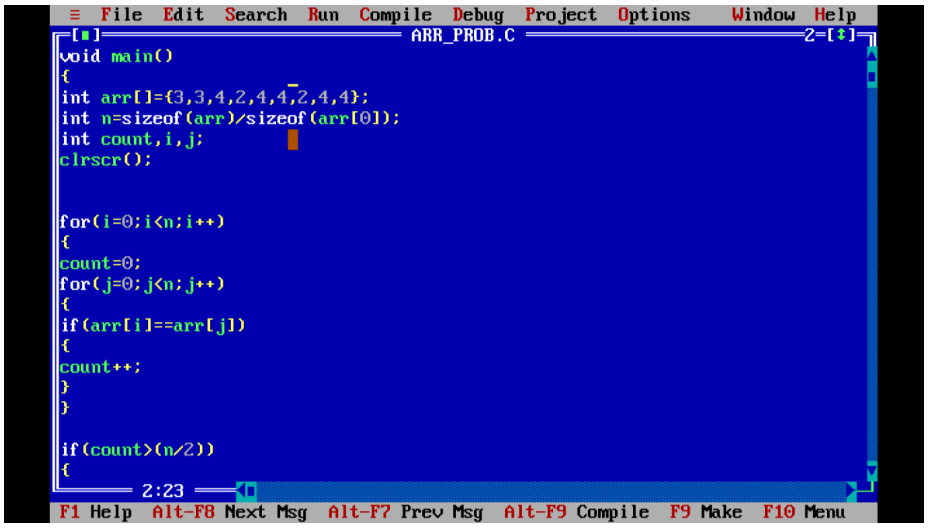
ScreenShots:

PROGRAMS

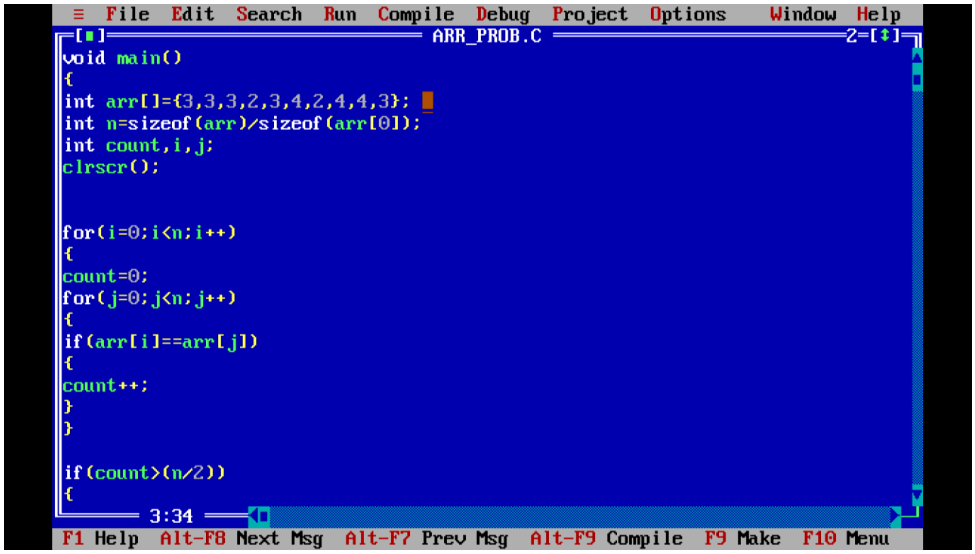




INPUT 01:

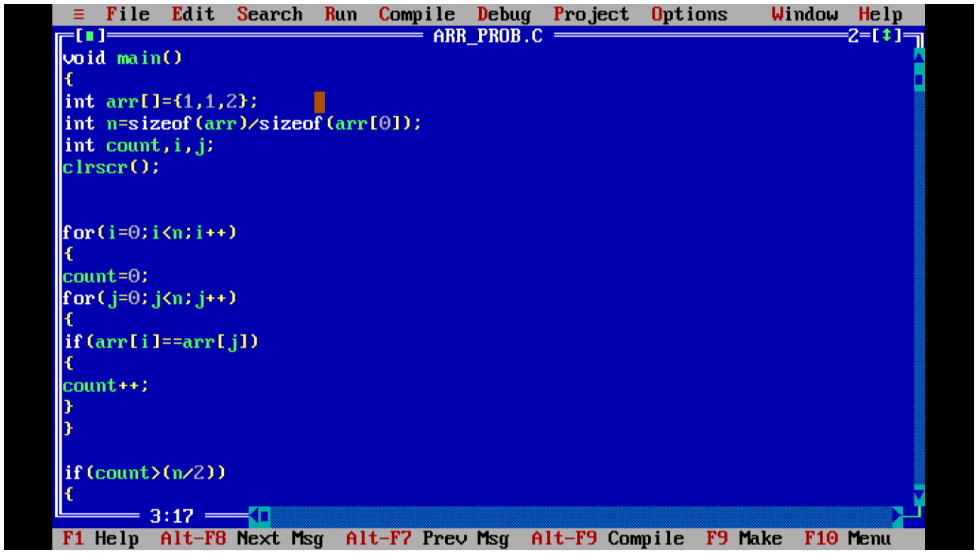


INPUT 02



OUTPUT02

INPUT 03


File Edit Search Run Compile Debug Project Options Window Help
ARR_PROB.C
void main()
{
int arr[]={1,1,2};
int n=sizeof(arr)/sizeof(arr[0]);
int count,i,j;
clrscr();
for(i=0;i<n;i++)
{
count=0;
for(j=0;j<n;j++)
{
if(arr[i]==arr[j])
{
count++;
}
}
if(count>(n/2))
{
3:17
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu

OUTPUT 03


The Majority Element is:1_