

Majority Element

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

```
int findMajorityElement(int arr[], int n) {
```

```
    int candidate = -1, count = 0;
```

```
    for (int i = 0; i < n; i++) {
```

```
        count += (arr[i] == candidate) ? 1 : (count == 0 ? (candidate = arr[i], 1) : -1);
```

```
    }
```

```
    count = 0;
```

```
    for (int i = 0; i < n; i++) {
```

```
        if (arr[i] == candidate) count++;
```

```
    }
```

```
    return (count > n / 2) ? candidate : -1;
```

```
}
```

```
int main() {
```

```
    int arr[100], n;
```

```
    // Input size and elements of array
```

```
    printf("Enter size of the array: ");
```

```
    scanf("%d", &n);
```

```
printf("Enter elements: ");

for (int i = 0; i < n; i++) {

    scanf("%d", &arr[i]);

}


// Find and print majority element

int result = findMajorityElement(arr, n);

printf(result != -1 ? "Majority Element: %d\n" : "No Majority Element\n", result);


return 0;

}
```