

Experiment No:2

Experiment Name: Write a C Program to check whether a person is eligible to vote or not using if-else.

Objective:

- To check whether a person is eligible to vote based on age using an if-else statement.

Problem analysis:

Write a C program to determine whether a person is eligible to vote based on their age. The voting age is typically 18 years or older.

Input variable	Output variable	Processing variable	Header file
age (int)	Check if age \geq 18	Eligibility message	#include<stdio.h>

Algorithm:

Step-1: start the program

Step 2: Declare an integer variables age

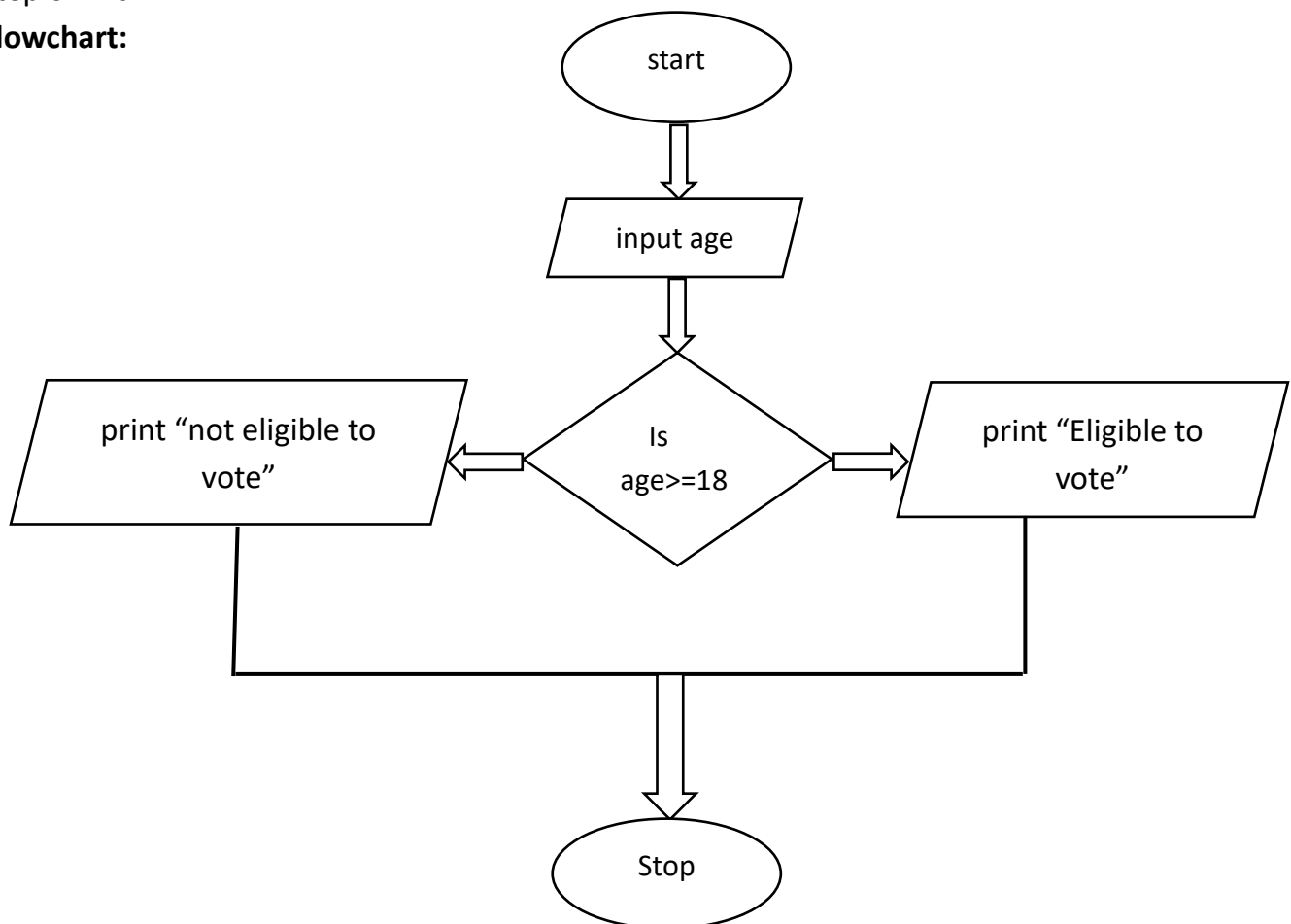
Step 3: input age

Step 4: if age \geq 18, print "Eligible to vote"

Step 5: Else, print "not eligible to vote"

Step 6: End.

Flowchart:



Source code:

```
1  #include <stdio.h>
2
3  int main() {
4      int age;
5
6      printf("Enter your age: ");
7      scanf("%d", &age);
8
9      if (age >= 18) {
10         printf("You are eligible to vote.\n");
11     } else {
12         printf("You are not eligible to vote.\n");
13     }
14
15     return 0;
16 }
17
```

Output:

```
Enter your age: 17
You are not eligible to vote.
```

```
Process returned 0 (0x0)   execution time : 24.751 s
Press any key to continue.
```

```
Enter your age: 20
You are eligible to vote.
```

```
Process returned 0 (0x0)   execution time : 5.763 s
Press any key to continue.
```

Discussion:

The provided C programs effectively use if else statements to make decisions. The first program finds the largest of three numbers through a clear and concise approach, while the second checks voting eligibility in a straight forward manner. Both programs demonstrate the fundamental use of if else statements in C programming. While alternative approach exist, the presented solutions are well suited for their respective tasks, offering a balance of efficiency and readability.