

# If-else C Program Example

## 1. Check whether a number is Even or Odd.

### Program:

```
#include<stdio.h>

void main()
{
    int num;
    printf(" Enter an Integer Value = ");
    scanf("%d", &num);
    if (num%2 == 0)
        printf("%d is Even Number \n", num);
    else
        printf("%d is Odd Number \n", num);
}
```

### Output:

```
Enter an Integer Value = 65
65 is Odd Number
```

## 2. Find the Largest of Two Numbers.

### Program:

```
#include <stdio.h>

void main()
{
    int a, b;
    printf("Enter Two Integer Value = ");
    scanf("%d %d", &a, &b);
```

```
if(a > b)
{
    printf("%d is Largest\n", a);
}
else if (b > a)
{
    printf("%d is Largest\n", b);
}
else
{
    printf("Both are Equal\n");
}
}
```

### Output:

Enter Two Integer Value = 1

0

1 is Largest

### **3. Check year is Leap year or not.**

#### Program:

```
#include <stdio.h>
void main()
{
    int year;
    printf("Enter Year = ");
    scanf("%d", &year);
```

```
if (( year%400 == 0) || (( year%4 == 0 ) &&( year%100 != 0)))
    printf("%d is a Leap Year", year);
else
    printf("%d is not a Leap Year", year);
}
```

### Output:

Enter Year = 1775

1775 is not a Leap Year

### **4. Check whether number is Positive or Negative.**

#### Program:

```
#include <stdio.h>
void main()
{
    int num;
    printf("Enter Integer Number = ");
    scanf("%d",&num);
    if (num >= 0)
    {
        if (num > 0)
            printf("%d is Positive", num);
        else
            printf("You have entered value zero.");
    }
    else
        printf("%d is Negative", num);
}
```

```
}
```

### Output:

Enter Integer Number = -4

-4 is Negative

### **5. Find Grade of a Student.**

#### Program:

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

```
void main()
```

```
{
```

```
    int english, chemistry, computers, physics, maths;
```

```
    float total, percentage;
```

```
    printf("Enter the Five Subjects Marks = ");
```

```
    scanf("%d%d%d%d%d", &english, &chemistry, &computers,  
&physics, &maths);
```

```
    total = english + chemistry + computers + physics + maths;
```

```
    percentage = (total / 500) * 100;
```

```
    printf("Total Marks = %.2f\n", total);
```

```
    printf("Marks Percentage = %.2f", percentage);
```

```
    if(percentage >= 90)
```

```
    {
```

```
        printf("\n Grade A");
```

```
    }
```

```
    else if(percentage >= 80)
```

```
    {
```

```
        printf("\n Grade B");
```

```
}  
else if(percentage >= 70)  
{  
    printf("\n Grade C");  
}  
else if(percentage >= 60)  
{  
    printf("\n Grade D");  
}  
else if(percentage >= 40)  
{  
    printf("\n Grade E");  
}  
else  
{  
    printf("\n Fail");  
}  
}
```

**Output:**

Enter the Five Subjects Marks =

44

66

88

99

33

Total Marks = 330.00

Marks Percentage = 66.00

Grade D

## 6. Calculate Profit or Loss in a Company.

### Program:

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

```
void main()
```

```
{
```

```
    float product_cost, sales_amount, amount;
```

```
    printf("Enter Product Cost = ");
```

```
    scanf("%f", &product_cost);
```

```
    printf("\nEnter Sales Price = ");
```

```
    scanf("%f", &sales_amount);
```

```
    if (sales_amount > product_cost)
```

```
    {
```

```
        amount = sales_amount - product_cost;
```

```
        printf("\n Profit Amount = %.4f", amount);
```

```
    }
```

```
    else if(product_cost > sales_amount)
```

```
    {
```

```
        amount = product_cost - sales_amount;
```

```
        printf("\n Loss Amount = %.4f", amount);
```

```
    }
```

```
    else
```

```
        printf("\n No Profit No Loss!");
```

```
}
```

### Output:

Enter Product Cost = 987

Enter Sales Price = 1000

Profit Amount = 13.0000

### **7. Calculate Electricity Bill.**

- First 50 Units Charge is Rs. 0.50/unit.
- For Next 100 Units Charge is Rs. 0.75/unit.
- For Next 100 Units Charge is Rs. 1.20/unit.
- For Unit Above 250 Charge is Rs. 1.50/unit.
- An Additional Surcharge of 20% is added to the bill.

### Program:

```
#include <stdio.h>

void main()
{
    int unit;
    float amt, total_amt, sur_charge;
    printf("Enter total units consumed = ");
    scanf("%d", &unit);
    if(unit <= 50)
    {
        amt = unit * 0.50;
    }
    else if(unit <= 150)
    {
        amt = 25 + ((unit-50) * 0.75);
```

```

}
else if(unit <= 250)
{
    amt = 100 + ((unit-150) * 1.20);
}
else
{
    amt = 220 + ((unit-250) * 1.50);
}
sur_charge = amt * 0.20;
total_amt = amt + sur_charge;
printf("Electricity Bill = Rs. %.2f", total_amt);
}

```

### Output:

Enter total units consumed = 35

Electricity Bill = Rs. 21.00

### **8. Calculate Gross Salary of an Employee.**

#### Program:

```

#include <stdio.h>

void main()
{
    float basic_salary, HRA, DA, gross_salary;
    printf("Enter the Basic Salary of an Employee = ");
    scanf("%f", &basic_salary);
    if (basic_salary <= 10000)

```

```

    {
        HRA = (basic_salary * 6) / 100;
        DA = (basic_salary * 10) / 100;
    }
else if (basic_salary <= 20000)
{
    HRA = (basic_salary * 12) / 100;
    DA = (basic_salary * 20) / 100;
}
else
{
    HRA = (basic_salary * 18) / 100;
    DA = (basic_salary * 30) / 100;
}
gross_salary = basic_salary + HRA + DA;
printf("Gross Salary of Employee = %.2f", gross_salary);
}

```

**Output:**

Enter the Basic Salary of an Employee = 4000

Gross Salary of Employee = 4640.00

**9. Find a Number which is divided by 5 and 11.**

**Program:**

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

```
void main()
```

```
{
```

```
int num;
printf("Enter an Integer Value = ");
scanf("%d", &num);
if ((num % 5 == 0) && (num % 11 == 0))
    printf("%d is Divisible by 5 and 11", num);
else
    printf("%d is Not Divisible by 5 and 11", num);
}
```

### Output:

Enter an Integer Value = 55  
55 is Divisible by 5 and 11

### **10. Check character is Alphabet or Digit.**

#### Program:

```
#include <stdio.h>
void main()
{
    char ch;
    printf("Enter one Character or Digit = ");
    scanf("%c", &ch);
    if( (ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z') )
    {
        printf("%c is an Alphabet", ch);
    }
    else if (ch >= '0' && ch <= '9')
    {
```

```
        printf("%c is a Digit", ch);
    }
    else
        printf("%c is not an Alphabet, or a Digit", ch);
}
```

### Output:

Enter one Character or Digit = z

z is an Alphabet

### **11. Check character is Vowel or Consonant.**

#### Program:

```
#include <stdio.h>

void main()
{
    char ch;
    printf("Enter one Alphabet = ");
    scanf(" %c", &ch);

    if(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' || ch ==
'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')
    {
        printf("%c is a Vowel.", ch);
    }
    else
    {
        printf("%c is a Consonant.", ch);
    }
}
```

```
}
```

### Output:

Enter one Alphabet = Y

Y is a Consonant.

### **12. Create a Menu System like [1] Add, [2] Edit, [3] Delete, [4] Exit.**

### Program:

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

```
void main()
```

```
{
```

```
    int ch;
```

```
    printf("[1] ADD");
```

```
    printf("\n[2] Edit");
```

```
    printf("\n[3] Delete");
```

```
    printf("\n[4] Exit");
```

```
    printf("\nEnter your choice = ");
```

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

```
    if(ch==1)
```

```
    {
```

```
        printf("Add option selected");
```

```
    }
```

```
    else if(ch==2)
```

```
    {
```

```
        printf("Edit option selected");
```

```
    }
```

```
else if(ch==3)
{
    printf("Delete option selected");
}
else if(ch==4)
{
    printf("Exit option selected");
}
else
{
    printf("Invalid Entry");
}
}
```

**Output:**

[1] ADD

[2] Edit

[3] Delete

[4] Exit

Enter your choice = 3

Delete option selected

\*\*\*\*\*

**Note:**

- All the programs are compiled and executed in Dev C++ code editor and save with .c extension.

- %.2f is used to print fractional values only up to 2 decimal places. You can also use %f to print fractional values normally up to six decimal places.

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