

1. Write a C program to input three numbers and determine which one is largest.

⇒ #include <stdio.h>

int main() {

int a, b, c;

printf("Enter three numbers: ");

scanf("%d %d %d", &a, &b, &c);

if (a >= b && a >= c) {

printf("%d is the largest number.\n", a); }

else if (b >= a && b >= c) {

printf("%d is the largest number.\n", b); }

else {

printf("%d is the largest number.\n", c); }

return 0;

}

2. Write a C program that accepts a no. from the user and displays whether it is positive, negative, or zero.

⇒ #include <stdio.h>

int main() {

int num;

printf("Enter a number: ");

scanf("%d", &num);

if (num > 0) {

printf("The number is positive.\n"); }

else if (num < 0) {

printf("The number is negative.\n"); }

else {

printf("The number is zero.\n"); }

return 0;

}

3. Write a C program to check whether a given year is leap or not.

```
⇒ #include <stdio.h>
int main () {
    printf ("Enter a year: ");
    scanf ("%d", &year);
    if ((year % 400 == 0) || (year % 4 == 0
    && year % 100 != 0)) {
        printf ("%d is a leap year.\n", year); }
    else {
        printf ("%d is not a leap year.\n", year); }
    return 0;
}
```

4. Write a C program to calculate the electricity bill based on the following conditions:

Upto 100 units → ₹ 1.5 per unit

101 to 200 units → ₹ 2 per unit

201 to 300 units → ₹ 3 per unit

Above 300 units → ₹ 5 per unit.

```
⇒ #include <stdio.h>
```

```
int main () {
```

```
    int units;
```

```
    float bill;
```

```
    printf ("Enter total electricity units consumed: ");
```

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

```
    if (units <= 100) {
```

```
        bill = units * 1.5; }
```

```
    else if (units <= 200) {
```

```
        bill = (100 * 1.5) + (units - 100) * 2; }
```

```
    else if (units <= 300) {
```

```
        bill = (100 * 1.5) + (100 * 2) + (units - 200) * 3; }
```

```
    else {
```

```
        bill = (100 * 1.5) + (100 * 2) + (100 * 3) + (units - 300) * 5; }
```

```
    printf ("Total electricity bill = RS. %.2f\n", bill);
```

```
    return 0;
```

```
}
```

5. Write a C program to input a number n and calculate the sum of first n natural numbers using the formula:

$$\text{sum} = n \times (n+1)/2$$

```
➤ #include <stdio.h>
int main () {
    int n;
    int sum;
    printf("Enter the number: ");
    scanf ("%d", &n);
    sum = n * (n+1)/2;
    printf("Sum of first %d natural numbers is: %d\n", n, sum);
    return 0;
}
```

6. Write a C program to input a number and check whether it is divisible by 5 and 11 or not.

```
➤ #include <stdio.h>
int main () {
    int num;
    printf("Enter a number: ");
    scanf ("%d", &num);
    if (num % 5 == 0 && num % 11 == 0) {
        printf ("%d is divisible by both 5 and 11.\n", num);
    }
    else {
        printf ("%d is not divisible by both 5 and 11.\n", num);
    }
    return 0;
}
```