

## 5. Factorial using Recursion.

### Sample code:

```
#include <stdio.h>

int factorial(int n) {
    if (n == 0 || n == 1)
        return 1; // Base case
    else
        return n * factorial(n - 1); // Recursive case
}

int main() {
    int num;

    printf("Enter a positive integer: ");
    scanf("%d", &num);

    if (num < 0)
        printf("Factorial is not defined for negative numbers.\n");
    else
        printf("Factorial of %d is %d\n", num, factorial(num));

    return 0;
}
```

### Output:

