Aim

To write a C program to find the factorial using recursion.

Algorithm

- 1. Start program.
- 2. Define recursive function fact(n):

```
    If n == 0 || n == 1 return 1.
    Else return n * fact(n-1).
```

- 3. Call fact(n) and print result.
- 4. End program.

Code

```
#include <stdio.h>

long long fact(int n) {
    if (n <= 1)
        return 1;
    return n * fact(n - 1);
}

int main() {
    int n;
    printf("Enter a number: ");
    scanf("%d", &n);
    printf("Factorial of %d = %lld\n", n, fact(n));
    return 0;
}</pre>
```

Sample Output

```
Enter a number: 6
Factorial of 6 = 720
=== Code Execution Successful ===
```

Result

The program computes factorial recursively.