

### Experiment 3: Factorial without Recursion

Aim:

To find the factorial of a given number without using recursion.

Algorithm:

1. Start.
2. Read n.
3. Initialize fact = 1.
4. Loop i = 1 to n: fact = fact \* i.
5. Print fact.
6. Stop.

Code:

```
#include <stdio.h>

int main() {
    int n, i;
    long long fact = 1;
    printf("Enter a number: ");
    scanf("%d", &n);

    for(i = 1; i <= n; i++) {
        fact *= i;
    }
    printf("Factorial of %d = %lld\n", n, fact);
    return 0;
}
```

Sample Output:

```
Enter a number: 5  
Factorial of 5 = 120
```

```
=== Code Execution Successful ===
```

Result:

The program computes the factorial without recursion.