```
#include <stdio.h>
Execution starts with
main function
                    int factorial(int n);
                    int main(void)
Call factorial, with
argument 4
                      int number = 4;
The value of
                      int result = factorial(number);
number, which is 4,
got assigned to new
                                                %d: %d.\n", number, result);
                      printf("Factorial of
variable named n
                      return 0;
return value of fact,
which is 24 back to
                    int factorial(int n) {
the caller function,
                      int fact = 1;
which is main
factorial(number)
                      for (int i = 1; i \le n; i++) {
is evaluated as 24
                        fact = fact * i;
 result stores 24
                      return fact;
```