**Function Recursion**

**Fibonacci Series**

#include <stdio.h>

int fibonacci(int i) {

if(i == 0) {

return 0;

}

if(i == 1) {

return 1;

}

return fibonacci(i-1) + fibonacci(i-2);

}

int main() {

int i;

for (i = 0; i < 10; i++) {

printf("%d\t\n", fibonacci(i));

}

return 0;

}

Factorial of a given number

#include <stdio.h>

long int multiplyNumbers(int n);

int main()

{

int n;

printf("Enter a positive integer: ");

scanf("%d", &n);

printf("Factorial of %d = %ld", n, multiplyNumbers(n));

return 0;

}

long int multiplyNumbers(int n)

{

if (n >= 1)

return n\*multiplyNumbers(n-1);

else

return 1;

}