



main.c



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Output

Clear

```
1 #include <stdio.h>
2 int fibonacci(int n) {
3     if(n == 0)
4         return 0;
5     else if(n == 1)
6         return 1;
7     else
8         return fibonacci(n-1) + fibonacci(n-2);
9 }
10
11 int main() {
12     int n;
13
14     printf("Enter n: ");
15     scanf("%d", &n);
16
17     printf("Fibonacci number = %d", fibonacci(n));
18
19     return 0;
20 }
```

Enter n: 10
Fibonacci number = 55
=== Code Execution Successful ===

3) write a program to find the nth Fibonacci number using recursion.

=> P/P :-

```
#include <stdio.h>
int fibonacci(int n) {
    if (n == 0)
        return 0;
    else if (n == 1)
        return 1;
    else
        return fibonacci(n-1) + fibonacci(n-2);
}

int main() {
    int n;
    printf("Enter n: ");
    scanf("%d", &n);
    printf("Fibonacci number is %d", fibonacci(n));
    return 0;
}
```

O/P :- Enter n = 10
Fibonacci number = 55