

```
1  /**
2   * Non-recursive implementation that lists the first 25 Fibonacci numbers
3   */
4  #include <cs50.h>
5  #include <stdio.h>
6
7  #define N 25
8
9  int main(void)
10 {
11     // declare the array, and store the first two values
12     int fibo[N];
13     fibo[0] = 0;
14     fibo[1] = 1;
15     // calculate and store the next 23 values
16     for (int i = 2; i < N; i++)
17     {
18         fibo[i] = fibo[i - 1] + fibo[i - 2];
19     }
20     // print the entire series
21     printf("The first %d numbers in the Fibonacci series are: \n", N);
22     for (int i = 0; i < N; i++)
23     {
24         printf("%i ", fibo[i]);
25     }
26     printf("\n");
27 }
```