Recursive Fibonacci

In class we saw the following very natural recursive code for computing Fibonacci numbers:

```
#include<iostream.h>

int fib(int n){

    if(n==1 || n==2)  return 1;

    return fib(n-1)+fib(n-2);

    };

void main(){

    for(int i=1; i<70; i++)

            cout<<" fib("<<i<<") = "<<fib(i)<<endl;

}
```

Questions:

1. Why does the program get increasingly slower for each successive value of i?

2. What technique can we use to speed it up? Write the code.

3. After some value if i, the values printed for fib(i) get quite "strange."
   a. What is strange about them and why is this happening?

   b. How can we fix this up?