```cpp
#include<bits/stdc++.h>
using namespace std;
/*
    fib(n) => 0 1 1 2 3 5 8 13
        n  => 0 1 2 3 4 5 6 7

        if recursion call same value again and again...
        then we can use memoisation

*/
int fib(int x)
{
    if(n <= 1)
    {
        return n;
    }
    else{
        return fib(n-2) + fib(n-1);
    }
}

int f[10] = {-1}; // global variable ...
int mfib(int n)
{
    if(n <= 1)
    {
        F[n] = n;
        return n;
    }
    else{

        if(F[n-2] == -1)
        {
            F[n-2] = mfib(n-2);
        }

        if(F[n-1] == -1)
        {
            F[n-1] = mfib(n-1);
        }

        return F[n-2] + F[n-1];

    }

}

int main()
{
    int x;
    x = 5;
    fib(x);
    mfib(x);
```

```
54 }
```