**E/19/251**

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***QUESTION 1***

**#include <stdio.h>**

**#define RECURSION**

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**int** **fib**(**int** n){

// base case

**if**(n==**1**) **return** **1**;

**if**(n==**0**) **return** **0**;

//Recursion

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

}

**#else**

**int** **fib**(**int** n){

**int** result = **0**;

**while**(n>**0**){

result+= n--;

}

**return** result;

}

**#endif**

**int** **main**(**void**){

**int** f;

**for**(**int** i=**0**;i<**15**;i+=**2**){

f = fib(i);

printf("\nFibonacci of %d is %d\n",i, f);

}

}

***QUESTION 2***

**#include <stdio.h>**

**int** **bin2dec**(**char** \*dec\_p){

**int** dec = **0**;

/\*

\*/

**while**(\*dec\_p){

//printf(". --> %d", (\*dec\_p-'0'));

dec = dec\***2** + (\*dec\_p-'0');

dec\_p++;

}

**return** dec;

}

**int** **main**(**void**){

**char** binNum1[] = "00100111";

**char** binNum2[] = "00110111";

**int** decNum1 = bin2dec(binNum1);

**int** decNum2 = bin2dec(binNum2);

printf("%s in binary is %d in decimal\n",binNum1, decNum1);

printf("%s in binary is %d in decimal\n",binNum2, decNum2);

**return** **0**;

}