To get nth bit of a number

ALGROTHIM:

STEP 1: Start the program

STEP 2: Print enter a number and use scanf %d and num

STEP 3: And print enter nth bit to check 0 to 31.

STEP 4: And use bit status

STEP 5: Finally return 0.

COMMANDS:

printf("Enter any number: ");

scanf("%d", &num); //Input number from user

bitStatus = (num >> n) & 1; // Right shift num, n times and perform bitwise AND with 1 .

PROGRAM:

#include <stdio.h>

int main()

{

int num, n, bitStatus;

printf("Enter any number: ");

scanf("%d", &num);

printf("Enter nth bit to check (0-31): ");

scanf("%d", &n);

bitStatus = (num >> n) & 1;

printf("The %d bit is set to %d", n, bitStatus);

return 0;

}

OUTPUT:

Enter any number: 12345

Enter nth bit to check (0-31): 5

The 5 bit is set to 1