Clear nth bit of a number

ALGORITHM:

STEP 1: Start the program

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

STEP 3: print enter the nth bit to clear 0 to 31

STEP 4: And use newnum

STEP 5: Finally return 0.

COMMANDS:

printf("Enter any number: ");

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

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

scanf("%d", &n); // Input bit number you want to clear

PROGRAM:

#include <stdio.h>

int main()

{

int num, n, newNum;

printf("Enter any number: ");

scanf("%d", &num);

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

scanf("%d", &n);

newNum = num & (~(1 << n));

printf("Bit cleared successfully.\n\n");

printf("Number before clearing %d bit: %d (in decimal)\n", n, num);

printf("Number after clearing %d bit: %d (in decimal)\n", n, newNum);

return 0;

}

OUTPUT:

Enter any number: 13

Enter nth bit to clear (0-31): 0

Bit cleared successfully.

Number before clearing 0 bit: 13 (in decimal)

Number after clearing 0 bit: 12 (in decimal)