

Write a Program in C using bitwise operator only .

1. Write a Program in C to set 3rd and 2nd bit .
i/p: int n= 51 o/p : 63
2. Write a Program in C to set 0th and 5th bit .
i/p: int n= 128 o/p: 161
3. Write a Program in C to clear 3rd and 2nd bit .
i/p: int n= 63 o/p: 51
4. Write a Program in C to toggle 1st and 4th bit .
i/p: int n= 42 o/p: 56
5. Write a Program in C to delete 0th bit .
i/p: int n= 170 o/p: 85
6. Write a Program in C to delete 0th, 1st, 2nd bit .
i/p: int n= 511 o/p: 63
7. Write a Program in C to delete 2nd bit .
i/p: int n= 39 o/p: 19
8. Write a Program in C to delete 5th bit .
i/p: int n= 99 o/p: 35

-----\$ Pawan KY

Hints:

How to delete bit in num :

1. to delete left most bit

: <<

2. to delete right most bit

: >>

3. to delete in b/w : it's very tricky

// need to write logic with help of [>> , << , |]

Ex.

WAP in C to delete 3rd bit in unsigned int num:

```
unsigned int n= 50;
```

```
// i/p : 50
```

```
0000 0000 0000 0000 0000 0000 0011 0010
```

```
// o/p: 26
```

```
0000 0000 0000 0000 0000 0000 0001 1010
```

How to delete bit : try to understand

----->

```
1st 3 bit need to store . n1=n<<29;  
n1=n1>>29;
```

```
then delete rightmost 4 bit , n2= n>>4 ;  
then left shift 3 times . n2=n2<<3;  
then bitwise OR // n=n1|n2;
```

i/p: is 50 , 3rd bit need to delete .

0000 0000 0000 0000 0000 0000 0011 0010

Step1. n1= n << 29;

0100 0000 0000 0000 0000 0000 0000 0000

Step2. n1 = n1 >> 29;

0000 0000 0000 0000 0000 0000 0000 0010

Step3. n2= n >> 4;

0000 0000 0000 0000 0000 0000 0000 0011

Step4. n2 = n2 << 3;

0000 0000 0000 0000 0000 0000 0001 1000

Step5. n= n1 | n2 ;

0000 0000 0000 0000 0000 0000 0000 0010

0000 0000 0000 0000 0000 0000 0001 1000

0000 0000 0000 0000 0000 0000 0001 1010

// o/p : 26

-----\$ Coding Sirji