

```

public class Solution {
    // you need to treat n as an unsigned value
    public int hammingWeight(int n) {
        int res = 0;
        while (n != 0) {
            res += n & 1;
            n >>= 1;
        }
        return res;
    }
}

```

```

public class Solution {
    // you need to treat n as an unsigned value
    public int hammingWeight(int n) {

        int count = 0;
        while(n != 0){
            count += (n & 1); // this beats 18%
            n >>= 1;
        }
        return count;
        /*
        int count = 0; // this is faster. beat 89%

        while(n != 0){
            n = n & (n - 1);
            count++;
        }

        return count;
        */
    }
}

```