

→ MSB | LSB bit manipulations

40

PRINT BINARY (59); // 00000111011

→ clear LSB till given bit:

eg: clear LSB till 4<sup>th</sup> bit for 59.

So, 00000111011 → 00000100000

→ Approach:

→ He will be required a binary 1111100000

→ He can get that from 0000011111

→ He can get that from 00000100000 - 1

=>  $(1 \ll 5) - 1$

INT A = 59;

INT i = 4; // till which bit we want to clear LSB.

INT B = (A & (~((1 << (i+1)) - 1)));

PRINT BINARY (B) // 00000100000

→ clear MSB till given bit

eg: clear MSB till 3<sup>rd</sup> bit for 59

So, 00000111011  $\rightarrow$  00000001011

$\rightarrow$  Approach:

$\rightarrow$  We will be required a binary 00000001111

$\rightarrow$  We can get that from 00000010000 - 1  
 $\Rightarrow (1 \ll 4) - 1$

i = 3; // fill which bit we want to clear MSB

int c = (a & ((1 << (i+1)) - 1));

PRINTBINARY(c); // 00000001011