

BITWISE RIGHT SHIFT OPERATOR IN JAVA

⇒ Right shift by 1 Divides the number by 2 in java

Ex: let's take a number 25 the output would be 12

Main.java	Run	Output
<pre>1 class bitwise 2 { 3 public static void main(String[] args) 4 { 5 int a = 25; //binary conversion is 11001 6 int b = a>>1; 7 System.out.println(b); 8 } 9 } 10</pre>		<pre>java -cp /tmp/LIiKPBErvk bitwise 12</pre>

⇒ Right shift by 2 removes two bits from right side of a binary number

Ex: 25 → binary conversion is 11001

→ 11001 >> 2 would be 110 therefore the value of binary number 110 is "6".

Main.java	Run	Output
<pre>1 class bitwise 2 { 3 public static void main(String[] args) 4 { 5 int a = 25; //binary conversion is 11001 6 int b = a>>2; //removes two bits from binary number i.e is 110 7 System.out.println(b); 8 } 9 } 10</pre>		<pre>java -cp /tmp/LIiKPBErvk bitwise 6</pre>

BITWISE LEFT SHIFT OPERATOR IN JAVA

⇒ Left shift by 1 Multiplies the number by 2 in java

Ex: 25 number multiplied by two in left shift by 1 is 50

Main.java	Output
<pre>1 class bitwise 2 { 3 public static void main(String[]args) 4 { 5 int a = 25; 6 int b = a<<1; 7 System.out.println(b); 8 } 9 } 10</pre>	<pre>java -cp /tmp/LIiKPBErvk bitwise 50</pre>

⇒ Left shift by 2 adds two zeroes to a binary number

Ex: 25 binary conversion is 11001 after left shift by 2 it will become 1100100

The value is 100

Main.java	Output
<pre>1 class bitwise 2 { 3 public static void main(String[]args) 4 { 5 int a = 25; // binary conversion is 11001 6 int b = a<<2; // adds two zeroes to the binary number i.e 1100100 7 System.out.println(b); 8 } 9 } 10</pre>	<pre>java -cp /tmp/LIiKPBErvk bitwise 100</pre>