Java Questions & Answers – Bitwise Operators

This section of our 1000+ Java MCQs focuses on Bitwise operators of Java Programming Language.

1. Which of these is not a bitwise operator?  
   a) &  
   b) &=  
   c) |=  
   d) <= [expand title=""]

2. Which operator is used to invert all the digits in binary representation of a number? a) ~ b) <<< c) >>>  
d) ^  
3. On applying Left shift operator, <<, on an integer bits are lost one they are shifted past which position bit? a) 1 b) 32 c) 33 d) 31 [expand title=""] Answer: d Explanation: The left shift operator shifts all of the bite in a value to the left specified number of times. For each shift left, the high order bit is shifted out and lost, zero is brought in from right. When a left shift is applied to an integer operand, bits are lost once they are shifted past the bit position 31. [/expand] 4. Which right shift operator preserves the sign of the value? a) << b) >>  
c) <<= d) >>=  
5. Which of these statements are incorrect?  
a) The left shift operator, <<, shifts all of the bite in a value to the left specified number of times. b) The right shift operator, >>, shifts all of the bite in a value to the right specified number of times.  
c) The left shift operator can be used as an alternative to multiplying by 2.  
d) The right shift operator automatically fills the higher order bits with 0.  
6. What is the output of this program?

1. **class** bitwise\_operator {
2. **public** **static** **void** main(String args[])
3. {
4. **int** var1 = 42;
5. **int** var2 = ~var1;
6. System.out.print(var1 + " " + var2);
7. }
8. }

a) 42 42  
b) 43 43  
c) 42 -43  
d) 42 43  
7. What is the output of this program?

1. **class** bitwise\_operator {
2. **public** **static** **void** main(String args[])
3. {
4. **int** a = 3;
5. **int** b = 6;
6. **int** c = a | b;
7. **int** d = a & b;
8. System.out.println(c + " " + d);
9. }
10. }

a) 7 2  
b) 7 7  
c) 7 5  
d) 5 2  
8. What is the output of this program?

1. **class** leftshift\_operator {
2. **public** **static** **void** main(String args[])
3. {
4. **byte** x = 64;
5. **int** i;
6. **byte** y;
7. i = x << 2;
8. y = (**byte**) (x << 2)
9. System.out.print(i + " " + y);
10. }
11. }

a) 0 64  
b) 64 0  
c) 0 256  
d) 256 0  
9. What is the output of this program?

1. **class** rightshift\_operator {
2. **public** **static** **void** main(String args[])
3. {
4. **int** x;
5. x = 10;
6. x = x >> 1;
7. System.out.println(x);
8. }
9. }

a) 10  
b) 5  
c) 2  
d) 20  
10. What is the output of this program?

1. **class** Output {
2. **public** **static** **void** main(String args[])
3. {
4. **int** a = 1;
5. **int** b = 2;
6. **int** c = 3;
7. a |= 4;
8. b >>= 1;
9. c <<= 1;
10. a ^= c;
11. System.out.println(a + " " + b + " " + c);
12. }
13. }

a) 3 1 6  
b) 2 2 3  
c) 2 3 4  
d) 3 3 6