**44-542 Object Oriented Programming**

**Shift operators**

1. Assume A = 44 and B = 2 for all the evaluations

Complete the below evaluations from a through g should be completed on paper

1. What is the binary representation of A 101100
2. What is Binary representation of B 10
3. What is your understanding of binary representation and decimal notation where do you use these binary and decimal notations?
4. What is value of A >> B in both binary and decimal notation? 11
5. What is the value of B >> A in both binary and decimal notation? 0
6. What is value of A << B in both binary and decimal notation? 176
7. What is the value of A >>> B in both binary and decimal notation?11
8. What is the value of B >>> A in both binary and decimal notation? 0
9. Assume A = 26 and B = 3 for all the evaluations
10. What is value of A >> B in both binary and decimal notation? 3
11. What is the value of B >> A in both binary and decimal notation? 0
12. What is value of A << B in both binary and decimal notation? 208
13. What is the value of A >>> B in both binary and decimal notation? 3
14. What is the value of B >>> A in both binary and decimal notation? 0

Complete the below evaluations using your IDE and by writing a program

Solution

**public static void main(String[] args) {**

**// TODO code application logic here**

**int A = 44;**

**int B = 2;**

**System.out.println(A >> B);**

**System.out.println(B >> A);**

**System.out.println(A << B);**

**System.out.println(A >>> B);**

**System.out.println(B >>> A);**

**}**

**Output**

**11**

**0**

**176**

**11**

**0**

**BUILD SUCCESSFUL (total time: 0 seconds)**

**public static void main(String[] args) {**

**// TODO code application logic here**

**int A = 26;**

**int B = 3;**

**System.out.println(A >> B);**

**System.out.println(B >> A);**

**System.out.println(A << B);**

**System.out.println(A >>> B);**

**System.out.println(B >>> A);**

**Output**

**3**

**0**

**208**

**3**

**0**

**BUILD SUCCESSFUL (total time: 0 seconds)**

**}**