Java Questions

1. What is unsigned and signed integer?

Sol :- Unsigned : it can hold Largest positive values but no negative values.

Both unsigned and signed int have same range ( 65536 and 256 )

Signed int will allow to represent both positive and negative ranges.

Java only supports signed types (except Char)

unsigned can represent a larger magnitude number than the corresponding signed variable.

1. Bitwise operators (|,&,^,~) Program

class Check {

public static void main(String[] args)

{

int a = 7;

int b = 6;

System.out.println("a&b = " + (a & b)); // 6

System.out.println("a|b = " + (a | b)); // 7

System.out.println("a^b = " + (a ^ b)); // 1

System.out.println("~a = " + (~a)); // -8

}

}

1. What is Shift operator?

These operators are used to shift the bits of a number left or right.

Two Types: Left Shift and Right Shift

Left shift : it will add extra zero’s to the number

Eg : a=8 //1000 binary

a<<2 // add two more zeros to the binary number

i.e. 100000= 32

Right Shift : it will skip the 0’s from the binary number

e.g. a=8 //1000

a>>2// 1000-> 10 -> 2

class Shift

{

public static void main(String args[])

{

int a = 8;

int b = a<<2;

int c = a>>2;

System.out.println(b); //32

System.out.println(c); //2

}

}