

1. Write the output?

```
public class H
{
}
public class I
{
}
public class J
{
    public static void main(String[] args)
    {
        System.out.println("from J class");
    }
}
```

2. Write the output?

```
class X
{
    public static void main(String[] args)
    {
        int x, y, z = 10, p;
        x = 10;
        y = p = 20;
        System.out.println(x);
        System.out.println(y);
        System.out.println(z);
        System.out.println(p);
    }
}
```

```
}  
}
```

3. Write the output?

```
class Z  
{  
    public static void main(String[] args)  
    {  
        int i;  
        System.out.println(i);  
    }  
}
```

4. Write the output?

```
class A  
{  
    public static void main(String[] args)  
    {  
        int i;  
        int j = i;  
        System.out.println(i);  
        System.out.println(j);  
    }  
}
```

5. Write the output?

```
class E
{
    public static void main(String[] args)
    {
        int i;
        int j = 10 + i;
        System.out.println(i);
        System.out.println(j);
    }
}
```

6. Write the output?

```
class F
{
    public static void main(String[] args)
    {
        int i;
        int j = 10 + ( i = 2) + i;
        System.out.println(i);
        System.out.println(j);
    }
}
```

7. Write the output for the following program?

```
class C
{
    public static void main(String[] args)
    {
        int i = 0;
        int j = i++;
        System.out.println(i);
        System.out.println(j);
    }
}
```

8. Write the output for the following program?

```
class L
{
    public static void main(String[] args)
    {
        int i = 0;
        int j = i++ + i + i-- + i +
        i-- + i++ + i-- + i +
        i++ + i-- + i + i++;
        System.out.println(i);
        System.out.println(j);
    }
}
```

}

}

9. What is the output?

```
class V
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        int i = 0;
```

```
        int j = ++i + --i + ++i + i +
```

```
            --i + i + --i + i +
```

```
            ++i + ++i + --i + i +
```

```
            --i + i + --i + i;
```

```
        System.out.println(i);
```

```
        System.out.println(j);
```

```
    }
```

```
}
```

10. What is the output?

```
class F
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        int i = 10;
```

```
        if(i = 10)
```

```
        {
```

```
            System.out.println("from if");
```

```
        }
```

```
        System.out.println("end of main");
    }
}
```

11. What is the output?

```
class J
{
    public static void main(String[] args)
    {
        boolean flag = false;
        if(!flag)
        {
            System.out.println("from if");
        }
        System.out.println("end of main");
    }
}
```

12. What is the output?

```
class S
{
    public static void main(String[] args)
    {
        int i = 0;
        if((i++ == 1) && (i++ == 1))
        {
            System.out.println("from if");
        }
    }
}
```

```
        i++;  
    }  
    System.out.println("end of main");  
    System.out.println(i);  
}  
}
```

13. What is the output?

```
class U  
{  
    public static void main(String[] args)  
    {  
        boolean flag = true;  
        if((flag = false) && (flag = true))  
        {  
            System.out.println("from if");  
        }  
        System.out.println("end of main");  
        System.out.println(flag);  
    }  
}
```

14. What is the output?

```
class X
{
    public static void main(String[] args)
    {
        int i = 0;
        if((i++ == 1) || (i++ == 1))
        {
            System.out.println("from if");
            i++;
        }
        System.out.println("end of main");
        System.out.println(i);
    }
}
```

15. What is the output?

```
class B
{
    public static void main(String[] args)
    {
        if(false)
            System.out.println(1);
            System.out.println(2);
            System.out.println(3);
    }
}
```



19. What is the output?

```
class F
{
    public static void main(String[] args)
    {
        else
        {
            System.out.println("from else");
        }
        System.out.println("main end");
    }
}
```

20. Write the output?

```
class J
{
    public static void main(String[] args)
    {
        if(false)
        if(true)
            System.out.println("inner if");
        else
            System.out.println("else1");
        else
            System.out.println("else2");
    }
}
```

21. What is the output?

```
class O
{
    public static void main(String[] args)
    {
        if(false)
        {
            System.out.println("from if");
        }
        else if(false)
        {
            System.out.println("from else if");
        }
        else if(false)
        {
            System.out.println("from else if 2");
        }
        else
        {
            System.out.println("from last else");
        }
    }
}
```

22. What is the output?

```
class P
{
    public static void main(String[] args)
```

```
{
    if(false)
    {
        System.out.println("from if");
    }
    else if(false)
    {
        System.out.println("from else if");
    }
    else
    {
        System.out.println("from last else");
    }
    else if(false)
    {
        System.out.println("from else if 2");
    }

}
}
```

23. What is the output?

```
class S
{
    public static void main(String[] args)
    {
        if(false)
```

```
{
    System.out.println("from if");
}
System.out.println();
else if(false)
{
    System.out.println("from else if");
}
else if(false)
{
    System.out.println("from else if 2");
}
else
{
    System.out.println("from last else");
}
}
}
```

24. What is the output?

```
class D
{
    public static void main(String[] args)
    {
        for(int i = 0; i < 10; i++)
        {
            System.out.println("i value:" + i);
        }
    }
}
```

```
        System.out.println("main end:" + i);
    }
}
```

25. What is the output?

```
class G
{
    public static void main(String[] args)
    {
        for(int i = 0; i < 10; i++);
        System.out.println("loop:" + i);
        System.out.println("main");
    }
}
```

26. What is the output?

```
class M
{
    public static void main(String[] args)
    {
        int i,j;
        for(i = 0, j = 20;
            (i < 15 || j > 15);
            i++, j--)
        {
            System.out.println(i + "," + j);
        }
    }
}
```

```
        System.out.println(i + "," + j);  
    }  
}
```

27. What is the output?

```
class O  
{  
    public static void main(String[] args)  
    {  
        int i,j;  
        for(i = 0, j = 20;  
            (i < 15 && j > 15);  
            i++, j--)  
        {  
            System.out.println(i + "," + j);  
        }  
        System.out.println(i + "," + j);  
    }  
}
```

28. What is the output?

```
class Q  
{  
    public static void main(String[] args)  
    {  
        for(int i = 0; i < 10; i++)  
        {
```

```
System.out.println("loop begin");
if(i > 5)
{
    continue;
}
System.out.println("loop end");
}
System.out.println("main end");
}
}
```

29. What is the output?

```
class U
{
    public static void main(String[] args)
    {
        for(int i = 0; i < 2; i++)
        {
            System.out.println("loop1 begin");
            for(int j = 0; j < 5; j++)
            {
                System.out.println("loop2 begin");
                if(j > 2)
                {
                    break;
                }
                System.out.println("loop2 end");
            }
        }
    }
}
```

```
    }  
    System.out.println("loop1 end");  
}  
System.out.println("main end");  
}  
}
```

30. What is the output?

```
class H  
{  
    public static void main(String[] args)  
    {  
        int i = 0;  
        while((i = 2) < 5)  
        {  
            System.out.println(i);  
            i++;  
        }  
    }  
}
```

31. Write the output?

```
class N  
{  
    public static void main(String[] args)  
    {  
        int i = 0;
```



```
while(i < 5)
{
    System.out.println("loop1 begin");
    int j = 0;
    while(j < 5)
    {
        j++;
        System.out.println("loop2 begin");
        if(j > 1)
        {
            continue;
        }
        System.out.println("loop2 end");
    }
    System.out.println("loop1 end");
    i++;
}
}
```

32. Write the output?

```
class V
{
    public static void main(String[] args)
    {
        int i = 0;
        do
```

```
{
    System.out.println("loop1 begin:" + i);
    int j = 0;
    do
    {
        System.out.println("loop2 begin:" + j);
        j++;
        System.out.println("loop2 end:" + j);
    }
    while (j < 2);
    i++;
    System.out.println("loop1 end:" + i);
}
while (i < 3);
}
}
```

33. Write the output?

```
class D
{
    static int i;
    static int j;
    public static void main(String[] args)
    {
        System.out.println(i);
        System.out.println(j);
        i = 10;
        j = 20;
        System.out.println(i);
    }
}
```

```
        System.out.println(j);
    }
}
```

34. Write the output?

```
class P
{
    static int i;
    public static void main(String[] args)
    {
        System.out.println(i);
        int i = 10;
        System.out.println(i);
        System.out.println(P.i);
        i = 20;
        System.out.println(i);
        System.out.println(P.i);
    }
}
```

35. Write the output?

```
class V
{
    static int i = 10;
    static int j = i;
    static int m = n;
    static int n = j;

    public static void main(String[] args)
    {
        System.out.println(i);
        System.out.println(j);
        System.out.println(m);
    }
}
```

```
        System.out.println(n);
    }
}
```

36. Write the output?

```
class X
{
    static int test1()
    {
        return 1;
    }
    static int i = test1() + test2();
    static int test2()
    {
        return 2;
    }
    public static void main(String[] args)
    {
        System.out.println(i);
    }
}
```

37. Write the output?

```
class Z
{
    static int i = test();
    static int j = 10;
    static int test()
    {
        return j;
    }
    public static void main(String[] args)
    {
        System.out.println(i);
    }
}
```

```
        System.out.println(j);
```

```
    }
```

```
}
```

38. Write the output?

```
class Z4
```

```
{
```

```
    static int i = test1();
```

```
    static int test1()
```

```
    {
```

```
        System.out.println("from test1");
```

```
        return 10;
```

```
    }
```

```
    public static void main(String[] args)
```

```
    {
```

```
        System.out.println(i);
```

```
        System.out.println(test1());
```

```
    }
```

```
}
```

39. Write the output?

```
class N
```

```
{
```

```
    static int i=10;
```

```
    static
```

```
    {
```

```
        System.out.println("N-SIB");
```

```
    }
```

```
}
```

```
class O
```

```
{
```

```
    static
```

```
    {
```

```
        System.out.println("O-SIB");
    }
    public static void main(String[]args)
    {
        System.out.println("O-main-b");
        System.out.println(N.i);
        System.out.println(N.i);
        System.out.println(N.i);
        System.out.println("O-main-e");
    }
}
```

40. Write the output?

```
class U
{
    static
    {
        System.out.println("U-SIB");
    }
    public static void main(String[]args)
    {
        System.out.println("U-main");
    }
}
class V
{
    static
    {
        System.out.println("V-SIB");
    }
    public static void main(String[]args)
    {
        System.out.println("V-main-begin");
    }
}
```

```
U.main(args);
System.out.println("-----");
U.main(null);
System.out.println("V-main-end");
}
}
```

41. Write the output?

```
class D
{
    static int i;
    static
    {
        i=10;
    }
    public static void main(String[]args)
    {
        System.out.println(i);
    }
}
```

42. Write the output?

```
class F
{
    static
    {
        i=1;
    }
    static int i=2;
    public static void main(String[]args)
    {
```

```
        System.out.println(i);  
    }  
}
```

43. Write the output?

```
class I  
{  
    static int i=test();  
    static  
    {  
        System.out.println("SIB1");  
    }  
    static int test()  
    {  
        System.out.println("test");  
        return 10;  
    }  
    public static void main(String[]args)  
    {  
        System.out.println("done");  
        System.out.println(i);  
    }  
    static  
    {  
        System.out.println("SIB2");  
    }  
}
```



44. Write the output?

```
class J
{
    static int i=test();
    static
    {
        System.out.println("Sib begin");
        main(null);
        System.out.println("Sib end");
    }
    static int test()
    {
        System.out.println("test begin");
        main(null);
        System.out.println("test end");
        return 20;
    }
    public static void main(String[]args)
    {
        System.out.println("main"+i);
    }
}
```

45. Write the output?

```
class I
{
    static int i = test();
    static
    {
        System.out.println("SIB1");
    }
    static int test()
    {
```

```
        System.out.println("test");
        return 10;
    }
    public static void main(String[]args)
    {
        System.out.println("done");
        System.out.println(i);
    }
    static
    {
        System.out.println("SIB2");
    }
}
```

46. Write the output?

```
class P
{
    static
    {
        System.out.println("P-SIB");
    }
    static void test1()
    {
        System.out.println("from test1");
    }
}
class Q
{
    public static void main(String[]args)
    {
        System.out.println("-----");
        P.test1();
        P.test1();
        P.test1();
    }
}
```

```
        System.out.println("-----");
    }
    static
    {
        System.out.println("Q-SIB");
    }
}
```

47. Write the output?

```
class C
{
    public static void test1()
    {
        System.out.println("from test1");
    }
    public static void main(String[] args)
    {
        System.out.println("from main");
    }
    public static void test2()
    {
        System.out.println("from test2");
    }
}
```

48. Write the output?

```
class L
{
    public static void main(String[] args)
    {
        System.out.println("from main");
    }
}
```

```
        return 100;
    }
}
```

49. Write the output?

```
class M
{
    public static void main(String[] args)
    {
        System.out.println("main begin");
        return;
        System.out.println("main end");
    }
}
```

50. Write the output?

```
class N
{
    public static void main(String[] args)
    {
        System.out.println("main begin");
        if(true)
        {
            System.out.println("from if");
            return;
        }
        System.out.println("main end");
    }
}
```

51. Write the output?

```
class G
{
    public static void main(String[] args)
    {
        System.out.println("main begin");
        test1();
        System.out.println("main end");
    }
    public static void test1()
    {
        System.out.println("test1 begin");
        test2();
        System.out.println("test1 end");
    }
    public static void test2()
    {
        System.out.println("test2 begin");
        System.out.println("test2 end");
    }
}
```

52. Write the output?

```
class R
{
    static int i = test();

    static
    {
        System.out.println("SIB:" + i);
    }
}
```

```
        i = 10;

    }

    public static int test()
    {
        System.out.println("test:" + i);
        return 69;
    }

    public static void main(String[] args)
    {
        System.out.println("main begin:" + i);
        i = 33;
        System.out.println(test());
        System.out.println("main end:" + i);
    }
}
```

53. Write the output?

```
class A
{
    int i;
    public static void main(String[] args)
    {
        System.out.println(i);
    }
}
```

```
}
```

```
}
```

54. Write the o/p?

```
class W
```

```
{
```

```
    int i;
```

```
    static W test(W w1)
```

```
    {
```

```
        W w2 = new W();
```

```
        w2.i = w1.i;
```

```
        return w2;
```

```
    }
```

```
    public static void main(String[]args)
```

```
    {
```

```
        W obj = new W();
```

```
        obj.i = 20;
```

```
        W rv = test(obj);
```

```
        System.out.println(rv.i);
```

```
    }
```

```
}
```

55. Write the o/p?

```
class X
```

```
{
```

```
    int i;
```

```
    static void test(X obj1, X obj2)
```

```
    {
```

```
        int i = obj1.i;
```

```
        obj1.i = obj2.i;
        obj2.i = i;
    }
    public static void main(String[] args)
    {
        X x1 = new X(), x2 = new X();
        x1.i = 10;
        x2.i = 20;
        System.out.println(x1.i);
        System.out.println(x2.i);
        test(x1, x2);
        System.out.println(x1.i);
        System.out.println(x2.i);
    }
}
```

56. Write the o/p?

```
class F
{
    int i;
    F(int k)
    {
        i = 10;
        System.out.println("F()");
    }
    public static void main(String[] args)
    {
        F f1 = new F();
    }
}
```



```
        System.out.println(f1.i);
```

```
    }
```

```
}
```

57. Write the o/p?

```
class K
```

```
{
```

```
    K()
```

```
{
```

```
        System.out.println("K()");
```

```
}
```

```
{
```

```
        System.out.println("IIB1");
```

```
}
```

```
    K(int i)
```

```
{
```

```
        this();
```

```
        System.out.println("K(int)");
```

```
}
```

```
    static
```

```
{
```

```
        System.out.println("SIB1");
```

```
}
```

```
    K(int i, int j)
```

```
{
```

```
        this(j);
```

```
        System.out.println("K(int,int)");
```

```
}
```

```
static
{
    System.out.println("SIB2");
}
{
    System.out.println("IIB2");
}
public static void main(String[] args)
{
    K k1 = new K();
    System.out.println("-----");
    K k2 = new K(100);
    System.out.println("-----");
    K k3 = new K(100,200);
    System.out.println("-----");
}
}
```

58. Write the o/p?

```
class F
{
    static int count;
    F()
    {
        count++;
    }
    F(int i)
    {
```

```
        count++;
    }
    F(int i, int j)
    {
        count++;
    }
    {
        count++;
    }
    public static void main(String[] args)
    {
        F e1 = new F();
        F e2 = new F(10);
        F e3 = new F(10, 20);
        F e4 = new F(20);
        F e5 = new F();
        System.out.println(count);
    }
}
```

59. Private member of one class can be used in another class?

60. Write the order of access level from narrower to wider?

61. Write the order of access level from wider to narrower?

62. Write the output?

```
class C
{
    public static void main(String[]args)
    {
        short i = 20;
        double d = i;
        System.out.println("done");
    }
}
```

63. Write the output?

```
class Manager30
{
    public static void main(String[] args)
    {
        A a1 = new C();
        if(a1 instanceof A)
        {
            System.out.println("to A");
            A a2 = (A)a1;
            if(a1 instanceof B)
            {
                System.out.println("to B");
                B b2 = (B)a1;
            }
            if(a1 instanceof C)
            {

```

```
        System.out.println("to C");
        C c2 = (C)a1;
    }
    if(a1 instanceof D)
    {
        System.out.println("to D");
        D d2 = (D)a1;
    }
}
}
```

64. Write the Answer

```
public class M18
{
    public static void main(String [] args)
    {
        String s1 = "abc";
        String s2 = "true";
        String s3 = "TRUE";
        boolean b1 = Boolean.parseBoolean(s1);
        boolean b2 = Boolean.parseBoolean(s2);
        boolean b3 = Boolean.parseBoolean(s3);
        System.out.println(b1);
        System.out.println(b2);
        System.out.println(b3);
    }
}
```

65. Assume

We are compiling in JDK 1.4

What is the result?

```
public class M31
{
    static void test(Character obj)
    {
        System.out.println("done");
    }
    public static void main(String [] args)
    {
        test('a');
        char c1 = 't';
        test(c1);
        Character c2 ='p';
        test(c2);
    }
}
```

66. Write the order of preference in wrapper classes?