

1) If you declare an array `double[] list = {3.4, 2.0, 3.5, 5.5}`, the highest index in array list is _____.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

2) Assume `int[] t = {1, 2, 3, 4}`. What is `t.length`?

- A. 0
- B. 3
- C. 4
- D. 5

3) What is output of the following code:

```
public class Test {  
    public static void main(String[] args) {  
        int[] x = {120, 200, 016, 0x16, 0b10000};  
        for (int i = 0; i < x.length; i++)  
            System.out.print(x[i] + " ");  
    }  
}
```

- A. 120 200 16 16 10000
- B. 120 200 14 22 16
- C. 120 200 14 16 10000
- D. 016 is a compile error. It should be written as 16.....

4) کد زیر به ترتیب چه مقادیری را چاپ می کند؟

```
public class Test {  
    public static void main(String[] args) {  
        double[][] array = new double[3][3];  
        System.out.println(array.length);  
  
        System.out.println(array[0].length);  
        System.out.println(array[1].length);  
        System.out.println(array[2].length);  
        for (int i = 0; i < array.length; i++) {  
            array[i] = new double[i * 10];  
        }  
        System.out.println(array[0].length);  
        System.out.println(array[1].length);  
        System.out.println(array[2].length);  
    }  
}
```

5) Assume `double[][][] x = new double[4][5][6]`, what are `x.length`, `x[2].length`, and `x[0][0].length`?

- A. 4, 5, and 6
- B. 6, 5, and 4
- C. 5, 5, and 5
- D. 4, 5, and 4

```
int a[10];
for (int i = 0; i < 10; i++) {
    a[i] = i * 10;
}

double[] b = new double[10];
for (int i = 0; i <= 10; i++) {
    b[i] = i * 10;
}
```

7) What is $1.2 + 1.3 + 1.4 + 1.5 + 1.2 == 6.6$?

- A. true
- B. false
- C. There is no guarantee that $1.2 + 1.3 + 1.4 + 1.5 + 1.2 == 6.6$ is true.

8) Analyze the following code:

```
public class Test {
    public static void main(String[] args) {
        double[] x = {2.5, 3, 4};
        for (double value: x)
            System.out.print(value + " ");
    }
}
```

- A. The program displays 2.5, 3, 4
- B. The program displays 2.5 3 4
- C. The program displays 2.5 3.0 4.0
- D. The program displays 2.5, 3.0 4.0
- E. The program has a syntax error because value is undefined.

(9) خروجی های برنامه زیر را بنویسید

```
public class Test {
    public static void main(String[] args) {
        float a = 3.14F;
        double b = 3.14D;
        double c = 314e-3;
        System.out.println(a == b);
        System.out.println(b == c);
        System.out.println(c);
    }
}
```