**Tutorial 8:**

1)

|  |
| --- |
| class Test1 {  public      static void main(String[] args)      {          int arr[] = { 11, 22, 33 };          for (int i = 0; i < arr.length; i++)              System.out.print(arr[i] + " ");            System.out.println();            int arr2[] = new int[3];          arr2[] = { 11, 22, 33 };          for (int i = 0; i < arr2.length; i++)              System.out.print(arr2[i] + " ");      }  } |

2)

class Test2 {

public

    static void main(String[] args)

    {

        String str[] = { "Geeks", "for", "Geeks" };

        System.out.println(str.length);

        System.out.println(str[0].length);

    }

}

3)

class Test1 {

public

    static void main(String[] args)

    {

        int arr[] = new int[5];

        int arr2[] = new int['a'];

        byte bt = 10;

        int arr3[] = new int[bt];

        System.out.println(arr.length);

        System.out.println(arr2.length);

        System.out.println(arr3.length);

    }

}

4) Which of the following lines gives an error:

class Test4 {

public

    static void main(String[] args)

    {

        int[][][] arr1 = new int[1][2][3]; // Line 1

        int[][][] arr2 = new int[1][2][]; // Line 2

        int[][][] arr3 = new int[2][][]; // Line 3

        int[][][] arr4 = new int[][][]; // Line 4

        int[][][] arr5 = new int[][2][3]; // Line 5

        int[][][] arr6 = new int[][][3]; // Line 6

        int[][][] arr7 = new int[][2][]; // Line 7

    }

}

5)

class ArrayOutput  
{  
    public static void main(String s[])  
    {  
        int i[] = {12, 15, 16, 17, 19};  
  
        for(int i = 0; i < 5; i++)  
        {  
            System.out.println(i[i]);  
        }  
    }  
}

6)

public class SortArray   
{  
    public static void main(String[] args)   
    {  
        int[] array = {12, 15, 11, 13, 9, 25};  
        for (int i = 0; i < array.length - 1; i++)         {  
            if (array[i] > array[i + 1])   
            {  
                int temp = array[i];  
                array[i] = array[i + 1];  
                array[i + 1] = temp;  
            }

}

 System.out.println(Arrays.toString(array));

}

}

7)

class CalculateSum   
{  
    public static void main(String[] args)   
    {  
        int a[][] = {{1, 3, 4}, {2, 3}, {7, 6, 5, 4, 3, 2, 1}, {9}, {8}};  
        int sum = 0;  
        for(int i = 0; i < a.length; i++)  
        {  
            for(int j = 0; j < a[0].length; j++)  
            {  
                sum += a[i][j];  
            }  
        }  
        System.out.println("sum=" + sum);  
    }  
}

8)

public class FindSum   
{  
    public static void main(String[] args)   
    {  
        int[] a = {12, 15, 11, 13, 9, 25};  
        int[] a2 = {12, 15, 11, 13, 9, 25};  
        int sum = 0;  
        for (int i = 0; i < a.length; i++)   
        {  
            if (a[i] % 3 == a2[a.length - i] % 5)   
            {  
                sum += i \* i;  
            }  
        }  
        System.out.println("sum=" + sum);  
    }  
}

9)

**class** ArrayTut1 {

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

{

**int**[] a = {12, 15, 11, 13, 9, 25};

**int**[] a2 = {12, 15, 11, 13, 9, 25};

**int** sum = 0;

**for** (**int** i = 0; i < a.length; i++)

{

**if** (a[i] % 3 == a2[a.length - (i+1)] % 2)

{

sum += i \* i;

}

}

System.***out***.println("sum=" + sum);

}

}

10) Discuss the following points:

1. Advantages and disadvantages of Array?
2. Can we change the size of an array at run time?

11) Write java program to multiply two 2 D arrays of different dimensions:

Dimension of Array 1 is 10 X 4 and the dimension of Array 2 is 4 X 10.