SESSION 2 PROGRAMS(ARRAYS)

Program 1

```java
//Java Program to demonstrate the use of 1D Array.
public class OneDArray {

    public static void main (String[] args)
    {
      // declares an Array of integers.
      int[] arr, brr;

      //declare & initialize an Array of Integers at the same place itself
      int[] crr= {1,2,3};

      // allocating memory for 5 integers.
      arr = new int[5];

      // initialize the first elements of the array
      arr[0] = 10;

      // initialize the second elements of the array
      arr[1] = 20;

      //so on...
      arr[2] = 30;
      arr[3] = 40;
      arr[4] = 50;

      // accessing the elements of the specified array
      for (int i = 0; i < arr.length; i++)
         System.out.println("Element at index " + i +
                                    " : "+ arr[i]);
    }

}
```

Program2

```java
//Java Program to demonstrate the use of String Array.
//It also demonstrates the use of ForEach Loop
public class Main
{
    public static void main(String[] args)
    {

      String[] rgb = {"Red", "Green", "Blue","Yellow"};

        System.out.println("The string array elements:");
        for (String item: rgb)
      {
          System.out.print(item + " ");
      }
    }
```

```
    }
```

Program3

```
//Java Program to demonstrate the 2DArray example
    public class TwoDArray1 {
        public static void main (String[] args)
        {
          int[][] arr=new int[3][3];//3 row and 3 column
          arr[0][0]=1;
          arr[0][1]=2;
          arr[0][2]=3;
          arr[1][0]=4;
          arr[1][1]=5;
          arr[1][2]=6;
          arr[2][0]=7;
          arr[2][1]=8;
          arr[2][2]=9;
          System.out.println("The two-dimensional array is as follows:");
              for (int i=0; i< 3 ; i++)
              {
                  for (int j=0; j < 3 ; j++)
                  {
                      System.out.print(arr[i][j] + " ");
                  }
                  System.out.println();
              }
        }
    }
```
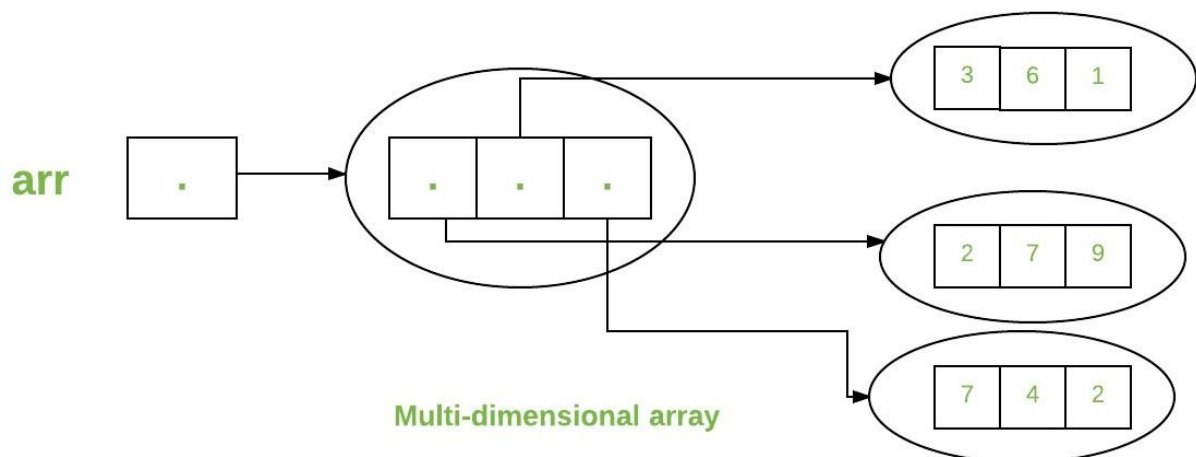
Program4

```java
//Java Program to demonstrate the 2DArray example
public class TwoDArray {

    public static void main(String args[])
    {
        // declaring and initializing 2D array
        int arr[][] = { {1,2,3},{4,5,6},{7,8,9} };

        System.out.println("The two-dimensional array is as follows:");
        for (int i=0; i< 3 ; i++)
        {
            for (int j=0; j < 3 ; j++)
            {
                System.out.print(arr[i][j] + " ");
            }
            System.out.println();
        }
    }

}
```


Multi-dimensional array

SESSION 2 ASSIGNMENTS

1. **Write a Program to store employee names of a company . The company has 4 employees . Print the employee names from the String Array**
2. **Write a Program to store roll nos of 10 students .Print the roll nos from the Array.**
3. **Write a program to store price of 3 fruits. Find & print the average price of the fruits .**