



Fundamentos de Java

Parte 3

Presenta

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```

public class LearnArrays {

    no usages
    public static void main(String[] args) {

        int[] vector = new int[3];

        vector[0] = 20;
        vector[1] = -12;
        vector[2] = 16;
        //vector[3] = 19; // Error: Index out of range

        System.out.printf("Vector = { 0: %d, 1: %d, 2: %d }",
                           vector[0], vector[1], vector[2]);

    }

}

```

```
String[] fruits = new String[5];
```



```
fruits[0] = "Apple";
```

```
fruits[1] = "Mango";
```

```
fruits[2] = "Pear";
```

```
fruits[3] = "Banana";
```

```
fruits[4] = "Watermelon";
```

```
// fruits[5] = "Kiwi"; // Error: Index out of range
```

```
System.out.println(Arrays.toString(fruits));|
```

```
[Apple, Mango, Pear, Banana, Watermelon]
```

```
Process finished with exit code 0
```



```
double[][] matrix_3x3 = new double[3][3];
```



```
matrix_3x3[0][0] = 8;
```

```
matrix_3x3[0][1] = 3;
```

```
matrix_3x3[0][2] = 7;
```

```
matrix_3x3[1][0] = 9;
```

```
matrix_3x3[1][1] = 5;
```

```
matrix_3x3[1][2] = 2;
```

```
matrix_3x3[2][0] = 1;
```

```
matrix_3x3[2][1] = 6;
```

```
matrix_3x3[2][2] = 4;
```

```
//matrix_3x3[3][0] = -1; // Error: Index out of range
```

```
//matrix_3x3[0][3] = -2; // Error: Index out of range
```

```
System.out.println(Arrays.toString(matrix_3x3[0]));
```

```
System.out.println(Arrays.toString(matrix_3x3[1]));
```

```
System.out.println(Arrays.toString(matrix_3x3[2]));
```

[8.0, 3.0, 7.0]

[9.0, 5.0, 2.0]

[1.0, 6.0, 4.0]



Process finished with exit code 0

```
ArrayList<String> fruits = new ArrayList<>();
```

```
fruits.add("Apple");
fruits.add("Mango");
fruits.add("Pear");
fruits.add("Banana");
fruits.add("Watermelon");
fruits.add("Melon");
fruits.add("Pineapple");
fruits.add("Kiwi");
fruits.add("Dragon-fruit");
```



```
String firstFruit = fruits.get(0);
String secondFruit = fruits.get(1);
String thirdFruit = fruits.get(2);
String lastFruit = fruits.get(fruits.size() - 1);
String secondLastFruit = fruits.get(fruits.size() - 2);
String thirdLastFruit = fruits.get(fruits.size() - 3);
```

```
System.out.printf("First fruit = %s %n", firstFruit);
System.out.printf("Second fruit = %s %n", secondFruit);
System.out.printf("Third fruit = %s %n", thirdFruit);
System.out.printf("Last fruit = %s %n", lastFruit);
System.out.printf("Second Last fruit = %s %n", secondLastFruit);
System.out.printf("Third Last fruit = %s %n", thirdLastFruit);
```

```
First fruit = Apple  
Second fruit = Mango  
Third fruit = Pear  
Last fruit = Dragon-fruit  
Second Last fruit = Kiwi  
Third Last fruit = Pineapple
```

Process finished with exit code 0