**Array [] in Java**

In Java, Array is a collection of similar datatype.

**Syntax:**

Datatype name[] = {Comma separated similar data….};

**Ways of declaring array:**

#1 way

int marks[] = new int[5]; //declaring marks size

marks[0] = 70;  
marks[0] = 80;  
marks[0] = 60;  
marks[0] = 50;

#2 way

Int marks[] = {70, 80, 60, 50};

**Example**

public class Main {

// main Method

public static void main(String[] args) {

int arr[] = {50, 60, 70, 90};

for (int i = 0; i < arr.length; i++) {

System.out.println(arr[i]);

}

}

}

**Output:**  
50  
60  
70  
90

**Array with User Input:**

**Example**

import java.util.Scanner;

public class Main {

// main Method

public static void main(String[] args) {

System.out.println("Enter the size of the Array: ");

Scanner input = new Scanner(System.in);

// Take the size of the array from the user  
 int arrSize = input.nextInt();

// Set the size of the array

int arr[] = new int[arrSize];

System.out.println("\n");

// Taking the elements in the array

System.out.println("Enter the elements in the Array:");

for(int i =0; i<arr.length; i++){

arr[i] = input.nextInt();

}

System.out.println("\n");

// Showing the elements in the array

for(int j =0; j<arr.length; j++){

System.out.println(arr[j]);

}

}

}

**Output:**

Enter the size of the Array:

5

Enter the elements in the Array:

10

9

8

7

4

10

9

8

7

4

**2-Dimensional Array:**

**Declaration:**

**Note:**

We can’t directly print the string array, because it’ll print its memory location.

**Example:**

public class Main {

// main Method

public static void main(String[] args) {

String str[][] = new String[3][3];

str[0][0] = "A";

str[0][1] = "B";

str[0][2] = "C";

str[1][0] = "D";

str[1][1] = "E";

str[1][2] = "F";

str[2][0] = "G";

str[2][1] = "H";

str[2][2] = "I";

for(int i=0; i<str.length; i++){

for(int j=0; j<str[i].length; j++){

System.out.println(str[i][j]);

}

}

}

}

**Output:**

A

B

C

D

E

F

G

H

I

**2-D Array with User Input:**

**Example:**

import java.util.Scanner;

public class Main {

// main Method

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

// Take number of rows

System.out.println("Enter Number of Rows:");

int rows = input.nextInt();

// Take number of columns

System.out.println("Enter Number of Columns:");

int columns = input.nextInt();

// Set the size of the str

String str[][] = new String[rows][columns];

// Take the inputs

for (int i = 0; i < rows; i++) {

for (int j = 0; j < columns; j++) {

str[i][j] = input.next();

}

}

// Read the inputs & Give Output

for (int i = 0; i < str.length; i++) {

for (int j = 0; j < str[i].length; j++) {

System.out.println(str[i][j]);

}

}

}

}

**Output:**

Enter Number of Rows:

2

Enter Number of Columns:

3

A  
B  
C  
D  
E  
F  
G  
H  
I

A  
B  
C  
D  
E  
F  
G  
H  
I