**Session 1**

1. **Write Java programs to create an array an initialize and print the elements.**

**Code:**

**public** **class** IniArr {

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

**int** arr[] = **new** **int**[5]; //First Method

arr[0]= 1;

arr[1]= 2;

arr[2]= 3;

arr[3]= 4;

arr[4]= 5;

**for**(**int** i= 0;i<5;i++) {

System.***out***.print(arr[i]);

}

System.***out***.println();

**int** ar[] = {10, 20, 30, 40, 50}; // Second Method

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

System.***out***.print(ar[i]+ " ");

}

}

}

**Output:**

12345

10 20 30 40 50

1. **Calculate the average of numbers using Array.**

**Code:**

**public** **class** Avg {

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

**int** ar[] = {10, 20, 30, 40, 50}; // Second Method

**int** sum=0;

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

sum=ar[i]+sum;

}

**int** avg = sum/ar.length;

System.***out***.print( "Avg of number: "+avg);

}

}

**Output:** Avg of number: 30

1. **Print the array elements using for each loop.**

**Code:**

**public** **class** ForEach {

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

**int** ar[] = {10, 20, 30, 40, 50};

**for**(**int** x : ar) {

System.***out***.print(x+" ");

}

}

}

**Output:**10 20 30 40 50

1. **Convert char Array to String**

**Code:**

**public** **class** CharToString {

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

**char** ar[] = {'s','w','e','e','t','y'};

String str = String.*valueOf*(ar);

System.***out***.println(str);

}

}

**Output:**sweety

1. **Add two Matrix using Multi-dimensional Arrays**

**Code:**

**public** **class** AddMatrix {

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

**int** arr1[][]= {{2,3},{4,5}};

**int** arr2[][]= {{4,1},{2,4}};

**int** n = arr1.length;

**int** arr3[][]= **new** **int**[n][n];

**for**(**int** i=0;i<n;i++) {

**for**(**int** j=0;j<n;j++) {

arr3[i][j]=arr1[i][j] +arr2[i][j];

}

}

**for**(**int** i=0;i<n;i++) {

**for**(**int** j=0;j<n;j++) {

System.***out***.print(arr3[i][j]+" ");

}

System.***out***.println();

}

}}

**Output:** 6 4

6 9

1. **Write a java program to get the class name of array in java.**

**Code:**

**public** **class** ClassName {

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

**int** arr[]= {45,23,56};

System.***out***.println(arr.getClass().getName());

}

}

**Output:** [I

1. **Find out the min numbers in an array.**

**Code:**

**public** **class** Min{

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

**int** ar[] = {100, 20, 3, 40, 50};

**int** min=ar[0];

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

**if**(ar[i]<min)

{min=ar[i];}

}

System.***out***.println( "Min number: " +min);

}

**Output:** Min number: 3