**44-542 Object Oriented Programming**

**Two-Dimensional Arrays KEY**

import java.io.\*;

import java.util.\*;

public class TwoDimArrayStuff

{

public static void main(String[] args) throws IOException

{

final int ROWS = 4;

final int COLS = 3;

double average;

Scanner myFileReader = new Scanner(

new File("2DArrayData.txt"));

int[][] numArray2D = new int[ROWS][COLS];

for (int i = 0; i < ROWS; i++)

{

for (int j = 0; j < COLS; j++)

{

numArray2D[i][j] = myFileReader.nextInt();

}

}

for (int i = 0; i < ROWS; i++)

{

for (int j = 0; j < COLS; j++)

{

System.out.print(numArray2D[i][j] + " ");

}

System.out.println();

}

System.out.println();

int sum = 0;

int cellCount = ROWS \* COLS;

for (int i = 0; i < ROWS; i++)

{

for (int j = 0; j < COLS; j++)

{

sum += numArray2D[i][j];

}

}

average = (double) sum / cellCount;

System.out.println("average = " + average);

System.out.println("Array values greater than average:");

for (int i = 0; i < ROWS; i++)

{

for (int j = 0; j < COLS; j++)

{

if(numArray2D[i][j] > average)

{

System.out.print(numArray2D[i][j] + " ");

}

}

}

System.out.println();

}

}