package com.mohammadabbasi;

import java.lang.reflect.Array;

//import java.lang.reflect.Array;

public class Wk3codingassignment {

public static void main(String[] args) {

//#1.

//Create an array of int called ages that contain the following values 3,9,23, 64, 2, 8, 28, 93

int[] ages = {3,9,23, 64, 2, 8, 28, 93, 103};

// a. Programmatically subtract the value of the first element in the array from the value in the last

// element of the array (do not use ages [7] in the code).args Print result to console.

System.***out***.println(ages[0]);

System.***out***.println(ages[ages.length - 1]);

// int loa = ages.length;

// int difference = Math.abs(ages[loa - loa] - ages[loa - 1]);

// System.out.println("First Element and last Element result is = " + difference);

//

// int sum = 0;

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

// sum += ages[i];

//

// }

//

// double average = sum / ages.length;

// System.out.println(average);

// System.out.println(ages[0] - ages[ages.length - 1]);

// double average = sum / Array.getLength(ages);

// System.out.println(average);

//

// 2.Create an array of String called names that contains the following

// values: “Sam”, “Tommy”, “Tim”, “Sally”, “Buck”, “Bob”.

// String[] names = new String [6];

// names[0] = "Sam";

// names[1] = "Tommy";

// names[2] = "Tim";

// names[3] = "Sally";

// names[4] = "Buck";

// names[5] = "Bob";

// String[] moreNames = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};

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

// System.out.println(names[i]);

//#2

String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};

int charCount = 0;

for (String name : names) {

charCount += name.length();

System.***out***.println(name +" : "+ name.length ());

}

System.***out***.println("Total amount of characters in names: "+ charCount);

System.***out***.println("Average # of characters per name : " + (charCount / names.length));

String joinedString = String.*join*(" ", names);

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

//2b

// for(String name: moreNames) {

// System.out.println(name);

//

// String[] names = new String [6];

// names[0] = "Sam";

// names[1] = "Tommy";

// names[2] = "Tim";

// names[3] = "Sally";

// names[4] = "Buck";

// names[5] = "Bob";

// System.out.println(names [0]);

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

// System.out.println(names[i]);

//#3

//How do you access the last element of an array?

int lastElement = (names.length - 1);

System.***out***.println("The last element is : " + names[lastElement]);

//#4

//How do you access the first element of an array?

System.***out***.println("First element is:" +names);

//#5

//String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};

int[] nameLengths = new int[names.length];

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

nameLengths[i] = names[i].length();

}

//6 Calculate the sum of all the elements in nameLengths, and print results.

System.***out***.println("this is question 6");

int sum = 0;

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

sum += nameLengths[i];

}

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

//#7.

for (int i = 0; i < 3; i++) {

System.***out***.print("Hello");

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

}

//#8 Write a method that takes two strings, firstName and lastName, and returns a full name (the full name

//should be the first and the last name as String separated by a space).

String firstName = "Mohammad";{

String lastName = "Abbasi";

String fullName = firstName + " " + lastName;

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

}

//#9

//Write a method that takes an array of int and returns true if the sum of all the ints in the array is

//greater than 100.

//public static boolean ifSumIsGreater(int[] numbers); {

// int sum = 0;

// for (int number : numbers) {

// sum += number;

// }

// if (sum > 100) return true;

// return false;

//

// }

//#10

//Write a method that takes an array of double and returns the average

// of all the elements in the array

public static double averageOfElements(double[] numbers) {

double sum = 0;

for (double number : numbers) {

sum += number;

}

return sum/numbers.length;}

//#11 Write a method that takes two arrays of double and returns true if the average of the elements in the

//first array is greater than the average of the elements in the second array.

public static boolean ifAverageIsGreter(double[] numbers, double[] numbers2) {

double sum =0;

double sum2 =0;

for (double number:numbers) {

sum += number;

}

for(double number:numbers2) {

sum2+=number;

}

for(double number:numbers2) {

sum2 +=number;

}

if(sum>sum2) return true;

return false;}

//#12

//Write a method called willBuyDrink that takes a boolean isHotOutside, and a double moneyInPocket, and

//returns true if it is hot outside and if moneyInPocket is greater than 10.50

public static boolean willBuyDrink(boolean a, double b) {

double moneyInPocket = 10.50;

if ((a==true) && (b > moneyInPocket)) return true;

return false;

}

//#13

//Create a method of your own that solves a problem. In comments, write what the method does and why you

// created it.

public static double averageLines(double[] a ) {

double sum = 0;

for (double number : a) {

sum += number;

}

return sum / a.length;