

**URL to GitHub Repository:** <https://github.com/aliustunyer/week3week4codingassignment>

**URL to Public Link of my Video:** <https://www.youtube.com/watch?v=XWJB69ZE278>

```
package week3week4coding;

public class weeks34codingassignment {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        // Question 1-a);

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

        int b = ages[ages.length-1] - ages [0];

        System.out.println(b);

        // Question 1-b);

        int[] ages2 = new int [9];

        for(int i=0 ; i<ages.length; i++) {
            ages2[i] = ages[i];
        }

        //I preferred to add the new age as 6;

        ages2[8] = 6;

        int c = ages2[ages2.length-1] - ages2 [0];
        System.out.println(c);

        //Question 1-c);

        double total = 0;
        for (int j=0; j<ages2.length;j++) {
            total += ages2 [j];
        }
        double avg = total / ages2.length ;
        System.out.println(avg);

        //Question 2-a);

        double totall = 0;
        String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};

        for (String name : names) {
            totall = totall + name.length();
        }
    }
}
```

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    }
    double average = totall / names.length;
    System.out.println(average);

    // Question 2-b);

String concatenate = "";

for (String name : names) {
    concatenate = concatenate + name + " " ;
}
System.out.println(concatenate);

    // Question 3);

    // to access the last element of array we use
    arrayname[arrayname.length-1] for example;

    int[] exampleQuestion3 = {1,2,3,4,5};
    System.out.println(exampleQuestion3[exampleQuestion3.length-1]);
    // printed number to the console is 5.

    // Question 4);

    // to access the first element of array we use arrayname[0] for
example;

    int[] exampleQuestion4 = {1,2,3,4,5};
    System.out.println(exampleQuestion4[0]);
    // printed number to the console is 1.

    //Question 5);

    int[] nameLengths = new int[6];

    for (int i = 0 ; i<names.length; i++) {
        nameLengths [i] = names[i].length();
    }
    for ( int lengthOfEachName : nameLengths) {
        System.out.println(lengthOfEachName);
    }

    //Question 6);

    int sum =0;

    for (int lengthOfEachName : nameLengths) {
        sum = sum + lengthOfEachName;
    }
    System.out.println(sum);

    // calling the method (question7)

String word = "hello";
int n = 3;
System.out.println(question7(word,n));

    //calling the method (question8)

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String firstName = "Ali";
String lastName = "Ustunyer";
System.out.println(question8(firstName,lastName));

    //calling the methods (question9 and question10)

int [] array = {15,12,24,32,8,13,44};
System.out.println(question9(array));
System.out.println(question10(array));

int [] array2 = {1,5,6,7,7,8,9};
System.out.println(question9(array2));
System.out.println(question10(array2));

    //calling the method (question11)

double [] doublearray1 = {15.33,12.12,24.99};
double [] doublearray2 = {5.90,1.55,2.1,3.4};
System.out.println(question11(doublearray1,doublearray2));
// output is: true;

System.out.println(question11(doublearray2,doublearray1));
// output is: false;

//calling the method (question12)

// case 1
boolean outsideIsHot = true ;
double rich = 15.5;
System.out.println(willBuyDrink(outsideIsHot,rich));
// output is: true;

//case 2
outsideIsHot = true ;
double poor = 9.5;
System.out.println(willBuyDrink(outsideIsHot,poor));
// output is: false;

//case 3
boolean outsideIsNotHot = false;
rich = 15.5;
System.out.println(willBuyDrink(outsideIsNotHot,rich));
// output is: false;

//case 4
outsideIsNotHot = false;
poor = 9.5;
System.out.println(willBuyDrink(outsideIsNotHot,poor));
// output is: false;

    //calling the method (question13)

// case 1
double householdIncome = 1500 ;
int householdSize = 2;
double disabilityRatio = 0.65;

System.out.println(isEligible(householdIncome,disabilityRatio,
householdSize ));

```

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        // output is: true;

        //case 2
        householdIncome = 1000 ;
        householdSize = 3;
        disabilityRatio = 0.65;

        System.out.println(isEligible(householdIncome,disabilityRatio,
householdSize ));
        // output is: false;

        //case 3
        householdIncome = 3000 ;
        householdSize = 7;
        disabilityRatio = 0.45;

        System.out.println(isEligible(householdIncome,disabilityRatio,
householdSize ));
        // output is: false;
    }

        //Question 7);

    public static String question7(String word, int n){

        String newString = "";
        for (int i =0; i < n ; i++) {
            newString += word ;
        }
        return newString;
    }

        //Question 8);

    public static String question8(String firstName, String lastName ){

        String fullName = firstName + " " +lastName ;
        return fullName;
    }

        //Question 9);

    public static boolean question9(int[] array){
        int sum = 0;
        boolean a;
        for (int ints : array) {
            sum = sum + ints;
        }
        if (sum > 100) {
            a = true;
        }
        else {
            a= false ;
        }
        return a;
    }

        //Question 10);

```

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public static double question10(int[] array){
    double sum = 0;

    for (int ints : array) {
        sum = sum + ints;
    }
    double average = sum / array.length;
    return average;
}

//Question 11);

public static boolean question11(double[] array1, double [] array2){
    double sum1 = 0;
    double sum2 = 0;
    boolean a = false;

    for (double arr1 : array1) {
        sum1 = sum1 + arr1;
    }
    double averagel = sum1 / array1.length;

    for (double arr2 : array2) {
        sum2 = sum2 + arr2;
    }
    double average2 = sum2 / array2.length;

    if (averagel > average2) {
        a = true;
    }
    return a ;
}

//Question 12);

public static boolean willBuyDrink(boolean isHotOutside, double
moneyInPocket){
    boolean drinkChoice = false;
    if (isHotOutside == true && moneyInPocket > 10.5) {

        drinkChoice = true;
    }
    else {
        drinkChoice = false;
    }
    return drinkChoice;
}

//Question 13 );

```

```
        // this method takes three variables, which are household income,  
disability ratio and household size  
        // and returns a boolean value as an indication of an applicant's  
eligibility for a social  
        // assistance program for the disabled people that requires  
income per capita in the household  
        //to be less than $500 and the disability ratio to be more than  
0.5 (%50).
```

```
    public static boolean isEligible(double householdIncome, double  
disabilityRatio, int householdSize){
```

```
        if (householdIncome / householdSize > 500 &&  
disabilityRatio > 0.5) {
```

```
            return true;
```

```
        }
```

```
        else {
```

```
            return false;
```

```
        }
```

```
    }
```

```
}
```