

### URL to GitHub Repository:

<https://github.com/ujjali2124/week3assignment/blob/master/week%203-%204%20assignment%20array%20and%20methods.pdf>

### URL to Public Link of your Video:

<https://youtu.be/-OLieEB VR8>

```
public class assignment {

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

//      1.      Create an array of int called ages that contains the following values:
3, 9, 23, 64, 2, 8, 28, 93
        int[] ages = { 3, 9, 23, 64, 2, 8, 28, 93, 95 };

//      a.      Programmatically subtract the value of the first element in the
array from the value in the last element of the array
//      (i.e. do not use ages[7] in your code).
//      Print the result to the console.
        System.out.print("Answer 1 : ");

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

//      b.      Add a new age to your array and repeat the step above to ensure
it is dynamic (works for arrays of different lengths).

//      c.      Use a loop to iterate through the array and calculate the average
age. Print the result to the console.
        int sum = 0;
        for (int i=0; i<ages.length;i++) {
            sum=sum+ages[i];
        }System.out.print("      ");

        System.out.println(sum/ ages.length);

//      2.      Create an array of String called names that contains the
following values: "Sam", "Tommy", "Tim", "Sally", "Buck", "Bob".
        String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};
//      a.      Use a loop to iterate through the array and calculate the average
number of letters per name.
//      Print the result to the console.
        double average = 0;
        for (int i = 0; i < names.length; i++) {
//          System.out.println(names[i].length());
            average=average+names[i].length();
        }
        System.out.print("Answer 2 : ");
        System.out.print(average/ names.length);
        System.out.print("      ");
    }
}
```

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//      b.      Use a loop to iterate through the array again and concatenate all
the names together, separated by spaces,
//      and print the result to the console.
      String result = "";
      for ( int i = 0; i < names.length; i++) {
          result = result + " " + names[i];
      }
      System.out.println(result.trim());
// 3.      How do you access the last element of any array?
      int last = names.length-1;
      System.out.print("Answer 3 : ");
      System.out.println(names[last]);
// 4.      How do you access the first element of any array?
      System.out.print("Answer 4 : ");
      System.out.println(names[0]);

// 5.      Create a new array of int called nameLengths.
//      Write a loop to iterate over the previously created names array and
//      add the length of each name to the nameLengths array.
//      int nameLengths = 0;
      System.out.print("Answer 5 : ");
      for ( int i = 0; i < names.length; i++) {
          System.out.print(names[i].length() + " ");
          nameLengths+=names[i].length();
      }
      int[] nameLengths = { 3, 5, 3, 5, 4, 3 };

// 6.      Write a loop to iterate over the nameLengths array and
//      calculate the sum of all the elements in the array.
//      Print the result to the console.
      int result1 = 0;
      for ( int i = 0; i < nameLengths.length; i++ ) {
          result1 = result1 + nameLengths[i];
      }System.out.println();
      System.out.print("Answer 6 : ");

      System.out.println(result1);

// 7.      Write a method that takes a String, word, and an int, n,
//      as arguments and returns the word concatenated to itself n number of
times.
//      (i.e. if I pass in "Hello" and 3, I expect the method to return
"HelloHelloHello").
      System.out.print("Answer 7 : ");
      myMethod("Hello",3);

// 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 a String separated by a space).
      System.out.print("Answer 8 : ");
      myMethod1("Katie", "Patel");

// 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.
      int[] hello = {1,45,67,45,6};
      System.out.print("Answer 9 : ");

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System.out.println(myMethod2(hello));
double[] hello1 = {1,23,34,34,678};
System.out.print("Answer 10 : ");
System.out.println(myMethod3(hello1));
double[] hello2 = {1,23,34,24};
System.out.print("Answer 11 : ");
System.out.println(myMethod4(hello1,hello2));
boolean isHotOutside = true;
double moneyInPocket = 10.51;
System.out.print("Answer 12 : ");
System.out.println(willBuyDrink(isHotOutside,moneyInPocket));
myMethod5(5,5,5);
System.out.print("Answer 13 : ");
System.out.println(myMethod5(5,5,5));

}
public static void myMethod(String name, int n) {
    String result="";
    for ( int i =0; i < n; i++ ) {
        result+=name;
    }
    System.out.println(result.trim());
}
public static void myMethod1(String firstName, String lastName) {
    String result1= firstName + " " + lastName;
    System.out.println(result1);
}
public static boolean myMethod2(int[] score) {
    int sum = 0;
    boolean success = false;
    for (int i = 0; i < score.length; i++) {
        sum = sum+score[i];
        if (sum > 100); {
            success= true;
            System.out.println(success);
        }
    }
    //
    System.out.println(success);
    return success;
}
//
//
//
10. Write a method that takes an array of double and returns the
average of all the elements in the array.
public static double myMethod3(double[] scores ) {
    double sum1 = 0;
    for (double i : scores) {
        sum1+=i;
    }
    return sum1 / scores.length;
}
public static boolean myMethod4(double arr1[],double arr2[]) {
    double sum3 = 0;
    for ( int i = 0; i < arr1.length; i++) {
        sum3 = sum3+arr1[i];
    }
}

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//      System.out.println(sum3/arr1.length);
//      double sum4 = 0;
//      for ( int i = 0; i < arr2.length; i++) {
//          sum4 = sum4+arr2[i];
//      }
//      System.out.println(sum4/arr1.length);
//      return ((sum3/arr1.length)>(sum4/arr1.length));
    }
    public static boolean willBuyDrink(boolean isHotOutside, double
moneyInPocket ) {
        return ( isHotOutside == true && moneyInPocket > 10.50 );
    }

    public static int myMethod5( int num1, int num2, int num3) {
        return ((num1 + num2 )/ num3);
    }

//      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.

//      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.
//      13. Create a method of your own that solves a problem. In comments,
//      write what the method does and why you created it.
//      i will create a method to calculate first two int and divide by third
//      one
//
    }

```

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eclipse-workspace - week3-4 coding assignment/src/assignment.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
  firstweekproject
  scanner
  week1 extra
  week2
  week2 boolean operators
  week2 extra assignment
  week2labs
  week2 loop
  week3-4 coding assignment
  week3 array methods
  week3 labs
  week3 menu application
  week3labs...
  application...
  application...
  application...
  application...
  application...
  application...
  application...
  Console
    <terminated> assignment [Java Application] C:\Users\UJIVAL.p2\poo\plugins\org.eclipse
    Answer 1 : 92 36
    Answer 2 : 3.8333333333333335 Sam Tommy Tim Sally Buck Bob
    Answer 3 : Bob
    Answer 4 : Sam
    Answer 5 : 3 5 3 5 4 3
    Answer 6 : 23
    Answer 7 : HelloHelloHello
    Answer 8 : Katie Patel
    Answer 9 : true
    Answer 10 : 154.0
    Answer 11 : true
    Answer 12 : true
    Answer 13 : 2
  1 public class assignment {
  2
  3
  4 public static void main(String[] args) {
  5     // TODO Auto-generated method stub
  6
  7 // 1. Create an array of int called ages that contains the following values: 3, 9, 23, 64, 2, 8, 28, 93
  8 int[] ages = { 3, 9, 23, 64, 2, 8, 28, 93, 95 };
  9
  10 // a. Programmatically subtract the value of the first element in the array from the value in the last
  11 // (i.e. do not use ages[7] in your code).
  12 // Print the result to the console.
  13 System.out.print("Answer 1 : ");
  14
  15 System.out.print(ages[ages.length-1] - ages[0]);
  16
  17 // b. Add a new age to your array and repeat the step above to ensure it is dynamic (works for arrays
  18
  19 // c. Use a loop to iterate through the array and calculate the average age. Print the result to the console.
  20
  21 int sum = 0;
  22 for (int i=0; i<ages.length;i++) {
  23     sum+=ages[i];
  24 }System.out.print(" ");
  25
  26 System.out.println(sum/ ages.length);
  27
  28 // 2. Create an array of String called names that contains the following values: "Sam", "Tommy", "Tim", "Sally", "Buck", "Bob".
  29 String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};
  30 // a. Use a loop to iterate through the array and calculate the average number of letters per name.
  31 // Print the result to the console.
  32 double average = 0;
  33 for (int i = 0; i < names.length; i++) {
  34     System.out.println(names[i].length());
  35     average=average+names[i].length();
  36 }
  37 System.out.print("Answer 2 : ");
  38 System.out.print(average/ names.length);
  39 System.out.print(" ");
  40
  41 // b. Use a loop to iterate through the array again and concatenate all the names together, separated by spaces,
  42 // and print the result to the console.
  43 String result = "";
  44 for (int i = 0; i < names.length; i++) {

```

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applic Console ×
<terminated> assignment [Java Application] C:\Users\UJJVAL.p2\pool\plugins\org.eclipse
Answer 1 : 92    36
Answer 2 : 3.8333333333333335    Sam Tommy Tim Sally Buck Bob
Answer 3 : Bob
Answer 4 : Sam
Answer 5 : 3 5 3 5 4 3
3 Answer 6 : 23
last Answer 7 : HelloHelloHello
Answer 8 : Katie Patel
Answer 9 : true
Answer 10 : 154.0
Answer 11 : true
Answer 12 : true
Answer 13 : 2
|
ays
he console.
```