```java
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("      ");

//              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?
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            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 : ");
            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 : ");
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            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];
            }
//          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  ) {
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            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 devide by third
one
//

    }
```

applic ☐ Console ✕

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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
```