Week 3-4 Coding Assignment

```java
package week3Project;

public class week3ArrayAndMethods {

    public static void main(String[] args) {
    int[] ages = {3, 9, 23, 64, 2, 8, 28, 93};

        int lengthOfArr = ages.length;
        int difference = Math.abs(ages[lengthOfArr - lengthOfArr]-
ages[lengthOfArr - 1]);

        System.out.println("Difference of first and last element in
ages[] = " + difference);

        int [] newAges = new int [ages.length];{

        System.arraycopy(ages, 0, newAges, 0, ages.length);{

        lengthOfArr = newAges.length;
        newAges[lengthOfArr -1] =100;
        difference = Math.abs(newAges[lengthOfArr - lengthOfArr] -
newAges[lengthOfArr -1]);

        System.out.println("Difference of first and last element in
newAges[] = " + difference);

        int sum = 0;
        for (int i = 0; i < newAges.length; i++){
            sum += newAges[i];

        }
        double average = sum / lengthOfArr;
        System.out.println("The average age in newAges[] = " + average);

        boolean isHotOutside = true;
        double moneyInPocket = 12;
        System.out.println(willBuyDrink(isHotOutside, moneyInPocket));
        //Step 2

        String[] names = {"Sam", "Tommy", "Tim", "Sally", "Buck", "Bob"};
        sum = 0;
        for (int i = 0; i < names.length; i++) {
            sum += names[i].length();

        }
        average = sum / names.length;
        System.out.println("The average number of letters per name in
names[] = " + average );


        String allNames = "";
        for (int i = 0; i < names.length; i++){
            allNames += names[i] + "";}

        System.out.println(allNames);{
```

```java
            }

            //Step 3
            System.out.println("Use array[arr.length] to access the last
element of an array");

            //Step 4
            System.out.println("Use array[0] to access the first element of
an array");

            //Step 5

            int[] nameLengths = new int[names.length];
            for (int i = 0; i < names.length; i++) {
                    nameLengths[i]= names[i].length();

            //Step 6
            sum = 0;
            for (int I = 0; I <nameLengths.length; I++) {
                        sum += nameLengths[I];{
            System.out.println("The sum of all lengths in nameLengths[] = " +
sum);}

            }
            //Step 7
            {
            String str = "Hello";

            System.out.println(str.repeat(3));
            }
            //Step 8
        String firstName = "Bill";
        String lastName = "Turner";
        String fullName = (firstName + "" + lastName);
        System.out.println(fullName);

            //Step9

            int sum1 = i;
            if(sum1>100)
            {
              System.out.println(true);
            }else {
              System.out.println(false);
            }

            }

            }

            }
            //Step 10
            double[] doubleArr = {0.1, 1.0, 236.4592, 1000.1};
            double[] emptyDoubleArr = {};
            System.out.println("getAverageOfDoubleArr() returns => " +
getAverageOfDouble(doubleArr));
            System.out.println("Passing empty double[] to
getAverageOfDoubleArr() returns => " + getAverageOfDouble(emptyDoubleArr));{
            }
```

```java
        }

        private static String getAverageOfDouble(double[] doubleArr) {
            // TODO Auto-generated method stub
            return null;
    }
        //Step11
    double[] anotherDoubleArr = {2.2, 3.3, 4.4, 5.5};
        private Object Arr;
        {
    System.out.println("isFirstArrAvgGreater returns => " +
isFirstArrAvgGreater(Arr, anotherDoubleArr));
        }

        //Step12
    public static boolean willBuyDrink(boolean isHotOutside, double
moneyInPocket) {

        if(isHotOutside = true && moneyInPocket>10.50){

            return true;
        }else {
            return false;

        }
        }

        //Step13

    private static boolean isGreaterthan(int sum) {
            // TODO Auto-generated method stub
            return false;
    }


    private String isFirstArrAvgGreater(Object arr2, double[]
anotherDoubleArr2) {
            // TODO Auto-generated method stub
            return null;
    }

        }
```