

Problem Set 5

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Do these problems for additional practice and challenge

Reminders:

- Finish last week's Homework before approaching this week's problems.
- Submit these problems to Dr. Rogers as soon as possible
- Email the .java files as we discussed in class instead of copying the code into the email
- If you don't solve every problem, it's fine. Just send us what you did. That being said, please refrain from copying the answers from online. All the instructors are aware that many of the problems that we give you can be found on StackOverflow and other community sites AND we do notice when a solution has been plagiarized.

1. **Array Difference:** Given an integer array find the difference between the numbers even and odd indices in the arrays. For example, if I have an array, [1, 2, 3, 4], then this method will return 2 as the sum of 4 and 2 is 2 greater than the sum of 1 and 3. Try implementing this in the method shown below. This problem will give you a good practice in using loops.

```
package week4;

public class Diff {
    public static void main(String[] args){
        int[] arr = {1,2,3,4};
        int x = evenOddDiff(arr);
        System.out.println(x); //should print out the value of two
    }
    public static int evenOddDiff(int[] arr){
```

```
        //complete this method  
        return 0;  
    }  
}
```

2. **Student:** This problem involves creating a class called Student with certain methods and attributes. The attributes that a Student Class should have are his age, his name, his grade, his id and his GPA. Student should also have a constructor that defines the attributes mentioned above, and an isOlder() method that compares two students. This problem allows you to understand Object Oriented Programming. If you need help, look back at the homework Date.