Project 6

Due Wednesday April 5

Project 6

- Implement the methods sum, greater and average in the ArrayFun class.

Project 6

```java
import java.io.*;
import java.util.*;

public class ArrayFun {
    public static int sum(int x[]) {
    //return the sum of the ints in x


    }


    public static int greater(int x[], int y) {
    //return the number of ints in x that are greater than y


    }
    public static double average(int x[]) {
    //return the average of the ints in x


    }
```

Project 6

```java
public static void main(String args[]) {
    int i = 0;
    int nums[];
    int size;
    int sum;
    int cmp;
    int numGreater;
    double avg;
    Scanner s = new Scanner(System.in);
    System.out.print("How many ints will be entered: ");
    size = s.nextInt();
    nums = new int[size];
    System.out.printf("Enter %d ints separated by whitespace: ", size);
    while (i < size) {
        nums[i] = s.nextInt();
        i = i+1;
    }
    sum = sum(nums);
    System.out.print("Enter an int to compare to array elements: ");
    cmp = s.nextInt();
    numGreater = greater(nums, cmp);
    avg = average(nums);
    System.out.printf("The sum of the ints is %d.\n", sum);
    System.out.printf("There are %d ints greater than %d.\n", numGreater, cmp);
    System.out.printf("The average of the ints is %.2f.\n", avg);
}

}
```

Project 6
Example Execution
User Input Shown in Bold

```
How many ints will be entered: 10
Enter 10 ints separated by whitespace: 8 16 42 12 30 12 5 23 37 9
Enter an int to compare to array elements: 16
The sum of the ints is 194.
There are 4 ints greater than 16.
The average of the ints is 19.40.
```

Project 6 Requirements

- You must write the code yourself

- The name of the class must be **ArrayFun** and the file containing your program must be called **ArrayFun.java.** Remember java is case sensitive.

- Include a comment describing the purpose of the program. The comment should include your name.

- You can ask questions of your classmates but you **MUST NOT** share code. If you have a question it is usually better to ask me.

- Use meaningful **variable names and proper indentation**.

Project 6 Submission

- Upload one zip file to Canvas. The zip file must contain only one file called ArrayFun.java.

- The project is worth 25 points. The project must be submitted on time.

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