

Looping Assignment

Welcome to the **Looping Assignment**! This repository contains Java programming exercises focused on **conditionals and looping** concepts.

Assignment 1: Sum of Even Numbers

Problem Description

Design and implement an application that reads an integer value and prints the sum of all even integers between 2 and the input value, inclusive. Print an error message if the input value is less than 2.

Key Concepts

- **Input validation** with conditional statements
- **For loops** with custom increments
- **Mathematical calculations** and accumulators
- **Error handling** and user feedback

Examples

```
Enter an integer value: 8
The sum of even numbers between 2 and 8 is 20.
```

Even numbers: 2, 4, 6, 8 → Sum = 20

Assignment 2: Character Per Line

Problem Description

Design and implement an application that reads a string from the user and prints each character on a separate line.

Key Concepts

- **String manipulation** and character access
- **For loops** with string indices
- **Character processing** using `charAt()`
- **Input/output** formatting

Examples

```
Enter a word: hello
h
```

```
e  
l  
l  
o
```

Assignment 3: Number Triangle Pattern

Problem Description

Design and implement an application that reads a positive integer n from the user and prints a number triangle pattern with n rows.

Key Concepts

- **Nested loops** for pattern generation
- **Console output formatting** with proper spacing
- **Pattern generation** algorithms
- **Loop control** and variable management

Examples

```
Enter a positive integer:  
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5
```