



Design Pattern Primer

Exercise: Flyweight

Overview

In this exercise, you will apply the Composite pattern to the calculator implementation.

User Requirement

You need to utilize Java compiler and byte code interpreter to create and compile classes, methods, and fields.

Introduction

In order to help reinforce understanding of this pattern, this exercise will only provide sparse instructions requiring the student to fill in the gaps. Instructions are provided below.

The flyweight pattern can be applied to manage the number of operation instances utilized by calculator instances.

Hints

Create a FlyweightFactory class. This class will define a collection that will reference unique Operations instances. Instances will be created and added to the collection the first time an operation is requested, subsequent requests for the operation will use the Operation stored in the cache.

- Modify the Calculator class execute() method to obtain an Operation instance from the FlyweightFactory.