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CS 476

Professor Grechanik

Homework 1

For this assignment, I decided to create a Scala language project for basic mathematical expressions. In this project I use the implementations of Objects and Case Classes to create my scopes and macros. In each function I provide two variables x & y, in which they will give the result of each mathematical expression. I decided to use a case class for each scope and the macro I implemented into the language. Moreover, each mathematical expression is a very basic one, where two variables are given on input in the print statement. Then each expression is executed upon the specific function call. Additionally, each expression is called upon a scope. I used three of them and one macro. The implementation of my language shows that in order for each of the expressions to work successfully you must print them using each scope and macro method I defined in each class. For example, in the code I provided, in order to print the addition expression, it would have to be stated in the scope class it is defined in, such as, Scope1.add. In conclusion, this Scala project contains simple expressions that use scopes and macros within case classes to produce outputs of simple mathematical expressions.