CSCI 271 Assignment 1: Grade Calculation Report

Introduction

This assignment is the first assignment from CSCI 271: Algorithms Analysis and Data Structures. It is designed to be an introduction to both Java programming and to show a given students programming capability.

Purpose

This java program is designed to accurately calculate the grade of a student when given scores. Grades are broken down into four categories, Assignments, Tests, Midterm, and Final Exam. Each category is averaged together when applicable to calculate the course grade. Since CSCI 271 has a unique final grade calculation, which is a piecewise function dependent, the grade calculation is much more complicated than most classes. This program helps to make this process easier.

Implementation

The implementation of the program is very straightforward and not too complicated. Unfortunately, this is not to the program's benefit. Due to my lack of experience in java, I was unable to create functions to handle the averaging of the assignments and tests categories. For this reason, it is very inefficient in how it is programmed.

Discussion

We can infer from the results below that the *Midterm* and *Final Exam* are the two most important factors when it comes to determining course grade. Even if a student had great assignment and test grades, if the midterm and final exam grade were lackluster, then the final grade suffered immensely. Additionally, we can see that no student obtained an A in the course.

Results (Name | Final Grade)

Garret	57.551020408163275
Janaya	29.102040816326536
Strickland	59.79591836734695
Hukill	70.17097875885048
Kath	17.48979591836735
MacCarthy	83.31428571428572
Consalve	59.79591836734695
Rea	84.5450312369846
Banna	57.979591836734706
Dag	89.78571428571429
Magdalene	61.675147855060395
Dorolisa	48.91836734693879
Dennie	62.30940441482718
Schuman	86.22857142857143
Osborne	27.408163265306126
Igal	75.94285714285715
Jessabell	72.14118908788005