

**22/SP-COP-2800-65294 Java Programming**

**Exercise 5.2**

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# Document Version Control

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| 0.1 | 2022 Feb 17 | Johnathan Webster | First Draft |

# Document Purpose

The purpose of this document is to define the future tuition class.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of this implementation is to provide the current tuition rate to the user. Then to display what the tuition will be in 10 years and finally the total cost of tuition for 4 years after the 10.

## Technical Implementation Components

The class consists of two for loops. The first calculates the total tuition after ten years and stores the values. The second for loop calculates the total tuition after the ten years has passed and then provides the total tuition for 4 years after the 10.

## Future tuition Implementation

The future tuition class will compute the tuition rate of $10K at 5% for 10 years. Then, will display the total cost of tuition of 4 years, after the ten, at a 5% interest rate. Challenged I ran into while creating this code:

1. Calculating the total: I found myself calculating an extra iteration as my loop control variable was set incorrectly.
   1. Using the round() method: I found my number would become quite large after multiple mathematical arrhythmic. The round() method solved this issue entirely.