The objective of this project is to apply the concepts covered in Modules 1 and 2.

For this activity, you will practice variables, expressions and assignment statements.

Budget Planner

Your task is to write a program that calculates how many hours a grader/TA at CCI needs to work to cover their living expenses.

The program should account for the cost of the following items:

- $625 monthly rent for a local apartment
- $27 monthly internet service
- $250 monthly grocery bill
- $150 monthly 'fun' allowance - funds to be used for leisurely activities

The program should perform the following calculations:

- Calculate how many hours the student will have to work in a week to afford the monthly expenses listed above.
- Calculate how many hours the student will have to work in a week to include an additional savings of $100 per month.

The program should output the following information:

- hourly wage which is $10
- each monthly item expense
- total monthly expenses
- how many hours per week the student would have to work to break even (spend the same amount they earn)
- how many hours per week the student would have to work to save $100 a month after paying all expenses

You may assume that a month is 4 weeks.

Part A - 5 points

Start by planning out the steps of your program using either a flowchart or pseudocode. Remember that pseudocode is not actual code. These should be simple statements that describe a single step in the process. Save your design in a file (file format can be text, pdf, doc, jpg, or png) with the name **budgetSteps**.

Part B - 15 points

Implement your solution in a class named **Budget.java**.

To start your class can look something like this:

```
public class Budget {
    Run | Debug
    public static void main(String[] args) {
        // **********
        // Project 1
        // **********



    }
}
```

You might face challenges as you attempt this project. This is okay. Trust me you are not the first one to feel this way when presented with their first programming project. We are confident you can figure it out, and complete it. Make sure to ask for clarifications if something is not quite clear and remember to utilize the resources available for you.

Coding Style – 3 points

As we mentioned in class, formatting your code makes a difference when someone else has to look at it and review it. It is important to practice good formatting habits. Here are some guidelines to follow:

- Appropriate variable names. In general, do not use single letters like X. Make your variables names descriptive (e.g., hrlyWage, rent, ...). Use camel case.
- Proper indentation
- Good commenting (explains what code is doing)
- Well-organized, elegant solution

Submission Requirements - 2 points

1. Submit the pseudocode or flowchart file for part A (**budgetSteps**).
2. Submit the code file for part B (**Budget.java**).
3. Submit a PDF document with the name **project1Info.pdf** that includes the following assignment information:
    1. List of references used to acquire information
    2. Explanation of any special or additional features you added, if any.
    3. Explanation of status, stopping point, and issues if incomplete.
    4. Discuss the easy and challenging parts of the assignment. How did you overcome all or some of the challenges?