VIRGINIA STATE UNIVERSITY

Department of Computer Science

CSCI495-01 iOS App Development (Fall 2022)

Lab 03

1. **(30 points)** Write a program that calculates and prints the number of minutes in a year.

Assume the following:

- 1 year = 365 days (Ignore leap years)
- 1 day = 24 hours
- 1 hour = 60 minutes

Below is an example of the correct output format:

The number of minutes in a year is *X*

2. **(30 points)** Light travels at 3×10^8 meters per second. A light-year is the distance a light beam travels in one year.
Write a program that calculates and displays the value of a light-year.

Useful facts:

- Seconds in a year = $365 \times 24 \times 60^2$
- Rate = 3×10^8 meters per second

Below is an example of the correct output format:

Light travels *X* meters in a year.

3. **(40 points)** An employee's total weekly pay equals the hourly wage multiplied by the total number of regular hours, plus any overtime pay.
Overtime pay equals the total overtime hours multiplied by 1.5 times the hourly wage.

Write a program that takes as inputs the hourly wage, total regular hours, and total overtime hours and displays an employee's total weekly pay.

Below is an example of the program inputs and output:

Enter the wage: $15.50
Enter the regular hours: 40
Enter the overtime hours: 12

The total weekly pay is $899.0

Submitting Your Work

1. ***Create*** the program using Xcode and saving it to a file named, **lab03.swift**.

2. Download main.swift file from Blackboard and use it to complete Lab03.

3. At the top of the empty file, write the following comment, modifying it to reflect your personal information. Writing these comments on top of your programs helps other developers understand basic information about your programs and is a good habit to develop.

```
/*
 * Program: lab03.swift
 *
 * Author:  YOUR FULL NAME
 * Date:    THE CURRENT DATE
 * Course:  CSCI495
 *
 * Program Description:
 *
 * WRITE PROGRAM DESCRIPTION
 *
 */
```

For this lab you will electronically submit the **lab03.swift** file via **Blackboard**

Due: 11:59PM, 9/16/2022