COSC 1336 – Fundamentals of Programming I

Requirements for each project

- ✓ Project starts with the following lines of comments.

```
# Ally Baba
# September  1 2021
# Project #1
# COSC 1336(TTh)
# ----------------------------------------------------------------
# Project Description
# This program converts feet to inches.  The user will
# enter the feet and the conversion rate.  The
# program will display the feet and inches
# ----------------------------------------------------------------
```

- ✓ Need to have main() and def main() in the project

```
def main():
    print('This program converts feet to inches.')
    #statements
```

- ✓ Variable names used: (see the style – camelback)
  - feetValue
  - inchesValue
  - conversionRate
- ✓ if statement:
  - if (average >= 90):
  - # the condition is wrapped inside ()
- ✓ while statement:
  - while (count <= 10):
  - #condition is wrapped inside ()

- ✓ Trace the code below:

```
# Ally Baba
# September  1 2021
# Project #1
# COSC 1336(TTh)
# ----------------------------------------------------------------
# Project Description
# Program that will convert feet to inches.
# The user enters data: feet and conversion rate.
# The program display the feet and corresponding inches
# ----------------------------------------------------------------
def main():
    # Information Section
    print('This function will convert feet to inches')

    # Gets input from users
    feetValue = getData('Enter the feet value ')
    conversionRate = getData('Enter the conversion reate from feet to inches: ')

    # Calls the function to convert feet to inches
    inchesValue = findConversion(feetValue, conversionRate)

    # Display the results to the users
    displayResults(feetValue, inchesValue)

# Function displays the results to the users
def displayResults(feet, inches):
    print('\nResult')
    print(feet, 'feet is equal to', format(inches, '.2f'), 'inches')

# Function performs the calculation that converts feet to inches
def findConversion(feet, inches):
    conversion = feet * inches
    return conversion

# Function receives user input
def getData(prompt):
    value = float(input(prompt))
    return value

main()
```