Python Penny's Pizza Planet Payroll System

Time required: 90 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Pseudocode

1. Write pseudocode for the exercise
2. Submit with the assignment

Requirements

In the vibrant town of Scottsbluff, Penny's Pizza Palace stood as a beloved local eatery, renowned not only for its delectable slices but also for its caring owner, Penny. Drawing from her background in IT, Cybersecurity, and a passion for fostering a happy team, Penny embarked on creating a streamlined payroll system for her pizzeria.

Penny's journey led her to master Python programming, enabling her to architect an efficient database to store employee data. Through her meticulous work, she developed a script that automated wage calculations based on hours worked, even factoring in different rates for varying shifts. Prioritizing security, Penny implemented robust encryption measures and designed personalized logins for employees to access their payroll information securely.

As Penny unveiled the Penny's Pizza Palace Payroll System to her staff, their excitement was palpable. The user-friendly interface and transparent insights into earnings left a lasting impact. Beyond the pizzeria, Penny's innovation resonated, inspiring neighboring businesses to consider similar tech-driven enhancements. Thus, Penny's dual expertise in pizza and programming transformed a simple payroll process into a testament to the potential of technology and dedication.

1. Create a Python program named: **payroll_system.py**.
2. Add a creative program title.
3. Get the following from the user.

    a. Name
    b. Hourly rate
    c. Hours worked
    d. Bonus code: A 10%, B 5%, no code 0%
4. Calculate pay
    a. Calculate pay by multiplying hours by rate.
    b. If the hours are over 40, calculate overtime pay at 1.5 times the hourly rate.
5. Format and display the overtime pay and total pay in currency using F-Strings.

TODO Outline of Program

You can use the following TODO outline to get started with your program.

```
"""
    Filename: payroll.py
    Author:
    Created:
    Purpose: Create a program that gets hours worked,
    hourly rate, and bonus code, calculates payroll
"""
# TODO: Create constants for anything you know before the program begins
OVERTIME_PAY = 40
OVERTIME_RATE = 1.5
BONUS_A = 0.1
BONUS_B = 0.05

# TODO: Print creative program title

# TODO: Get input: name, hourly rate, hours worked
# Bonus code: A 10%, B 5%, no code 0%

# TODO: Calculate regular pay

# TODO: Calculate overtime pay

# TODO: Calculate bonus

# TODO: Echo user input

# TODO: Display results
```

F-strings formatting example:

```
# Display regular pay
print(f"Regular pay: ${regular_pay:,.2f}")
```

```
$ before curly brace { indicates currency
: indicates formatting codes are coming up
, comma formats 1,000 separators
.2f formats a float to 2 decimal places
```

Example runs:

```
==============================================
|       Penny's Pizza Payroll System         |
==============================================
Enter name: Iron Man
Enter hours: 39
Enter rate: 20
Enter Bonus Code (A, B):

Payroll Advice: Iron Man
Regular pay:    $780.00
Overtime pay:   $0.00
Bonus:          $0.00
Gross pay:      $780.00
```

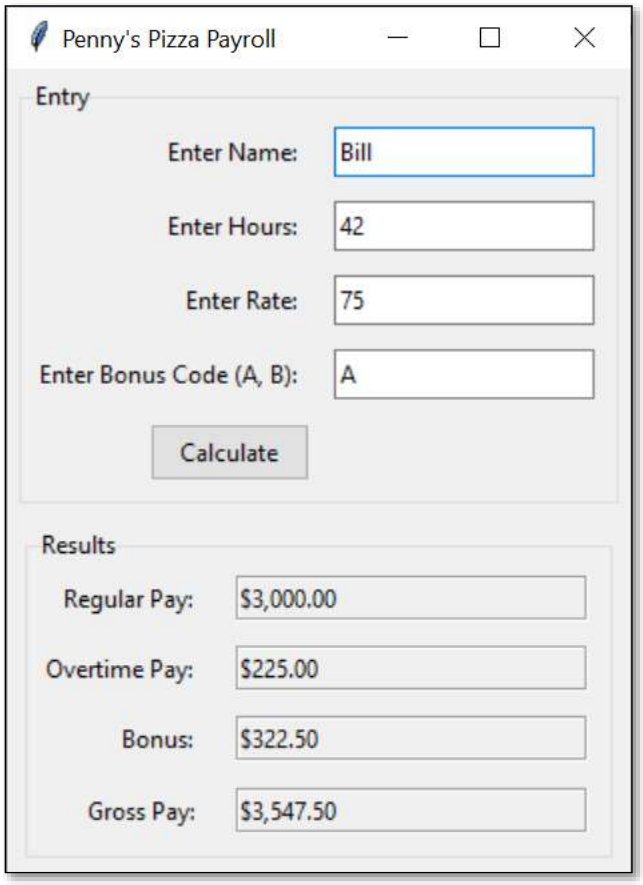
```
==============================================
|       Penny's Pizza Payroll System         |
==============================================
Enter name: Hawkeye
Enter hours: 41
Enter rate: 20
Enter Bonus Code (A, B):

Payroll Advice: Hawkeye
Regular pay:    $800.00
Overtime pay:   $30.00
Bonus:          $0.00
Gross pay:      $830.00
```

```
==============================================
|       Penny's Pizza Payroll System         |
==============================================
Enter name: Captain America
Enter hours: 50
Enter rate: 20
Enter Bonus Code (A, B): B

Payroll Advice: Captain America
Regular pay:    $800.00
Overtime pay:   $300.00
Bonus:          $55.00
Gross pay:      $1,155.00
```

```
==========================================
|       Penny's Pizza Payroll System      |
==========================================
Enter name: Black Widow
Enter hours: 55
Enter rate: 20
Enter Bonus Code (A, B): A

Payroll Advice: Black Widow
Regular pay:    $800.00
Overtime pay:   $450.00
Bonus:          $125.00
Gross pay:      $1,375.00
```

Challenge

1. Create a GUI version. This is an example.



Assignment Submission

1. Attach the pseudocode.
2. Attach the program files.

3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.