Python: Homework 1

Thanks for joining the first Python lecture given on the 16th of May, 2020. We appreciate you joining. In order to improve on your skills, constant practice is neccesary. Today, you have a homework assignment to complete.

How do to do homework? Simply use Repl.it to write your code and copy the URL to the code project and submit it in the provided Google Form.

Find the Mistakes

Objective: For this problem, students would have to look at the given code, which has bugs, and correct these bugs in order for the code to work.

A student wrote code to keep track of their hours and their net pay for a typical week. However, they are starting to learn how to code, so they have bugs in their code. Find the bugs to make his program work.

Listing 1: Broken Code

```
hourly_wage = input("Enter your wage per hour: ")
!hours_worked == input("Enter hours worked: ")
tax to take out  = 2000
gross_pay = hourly_wage * !hours_worked
netpay = gross_pay − tax to take out

print("In a typical week, I get paid " + hourly_wage + "per hour and work for " + !
    ↪ hours_worked + "hours a week. I get paid" + gross_pay, "a week, but get" + tax to
    ↪ take out + "taken out. So I get left with" + net_pay

)
```

Area of a Circle

Objective: Write a program that calculates the area of a circle. Keep in mind that the radius should be up to the user.

The only assumptions that are used are below:

- $\pi = 3.14$

- $A = \pi \cdot r^2$

Listing 2: Example Output

```
>>> Enter a radius for the circle: 6
Your circle has a radius of 113.04

>>> Enter a radius for the circle: 1
Your circle has a radius of 3.14
```