# Experiment No. 2: Tax Calculator

## 2.1 Objectives

### 2.1.1 General Objective

To demonstrate the use of python to solve for the monthly and annual tax of one individual.

## 2.2 Theory

### 2.2.1 Tax Table

TRAIN, or Tax Reform for Acceleration and Inclusion, is a new tax reform law that was signed into law during the Duterte administration in the Philippines on December 19, 2017, and it went into effect on January 1, 2018. From year 2023 onwards, the income tax rates will be shown as follows:

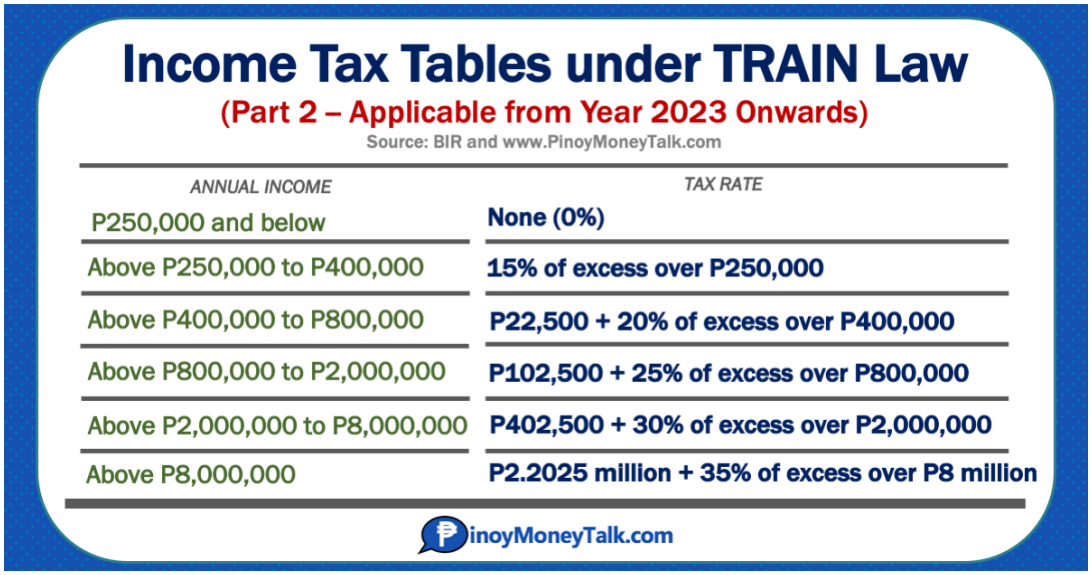


**Figure 2. 1 Tax Table**

## 2.3 Syntax and Functions

### 2.3.1 Input Function

**Usage:** Allows user to input variables

**Syntax:**

```
input(prompt)
```

### 2.3.2 Print Function

**Usage:** Display words/sentences for user to read

**Syntax:**

```
print(“example”)
```

### 2.3.3 Functions

**Usage:** Blocks of code designed to do one specific job that can be used again and again, rather than typing it multiple times

**Syntax:**

```
def “variable”():
```

## 2.4 Methodology

```
import os

monthlyIncome = float(input("Enter monthly income: "))
annualIncome = monthlyIncome*12

def taxCalc(annualIncome):
    if annualIncome <= 250000:
        return annualIncome*0 #0% Tax Rate
    elif annualIncome <= 400000:
        return annualIncome*.15 #15% Tax Rate
    elif annualIncome <= 800000:
        return annualIncome*.20+22500 #20% Tax Rate
    elif annualIncome <= 2000000:
        return annualIncome*.25+102500 #25% Tax Rate
    elif annualIncome <= 8000000:
        return annualIncome*.30+402500 #30% Tax Rate
    else:
        return annualIncome*.35+2205000

monthlyTax = taxCalc(annualIncome)/12
annualTax = taxCalc(annualIncome)

monthlyNetPay = monthlyIncome-monthlyTax
annualNetPay = annualIncome-annualTax

print ("\nYour monthly income is: {}".format (monthlyIncome))
print ("Your annual income is: {}".format(annualIncome))

print ("\nYour monthly tax is: {}".format (monthlyTax))
print ("Your annual tax is: {}".format(annualTax))
```

```
print ("\nYour monthly net pay: {}".format(monthlyNetPay))
print ("Your annual net pay is: {}".format(annualNetPay))

print("\nThank you for using this program!\n")

os.system("pause")
```

## 2.5 Results and Discussion

**Table 1.1 Summary of results for computing for Monthly and Annual Tax**

| Monthly Income | Annual Income | Manual Computation (Monthly Tax) | Manual Computation (Annual Tax) | Python Code (Monthly Tax) | Python Code (Annual Tax) |
|---|---|---|---|---|---|
| 50000 | 600000 | 11875 | 142500 | 11875.0 | 142500.0 |
| 25000 | 300000 | 3750 | 45000 | 3750.0 | 45000.0 |

From the results above, it can be concluded that the program created is working correctly. This is said because all the manual computations are the same as the ones computed from the program created with python.