Guided Task 6: User-defined Functions

Objective

In this guided task, you'll:

- Practise using some of Python's inbuilt functions
- Write your own function for calculating personal tax in UK

Instructions

The rules for simple tax calculation are as follows:

Personal allowance:£11,850

0 to 34,500 taxed at 20%

34,501 to 150,000 taxed at 40%

Over 150,000 taxed at 45%

1. Add a new file: tax.py and make it the startup file.
2. Create a function called getIncomeTax()
3. Calculate the income tax based on the simple tax calculation rules as seen above.

   Tip: You'll need to pass the salary to this function. Use a parameter called salary and base your calculations on the value held by the salary parameter.
4. After the calculation is finished, you can return the tax amount.
5. In the main part of your code, just below where you defined the function, write code to call getIncomeTax() and print the returned value.

   To test your code, pass different values to the function to test its functionality.

Note:

The structure of your code is very important. You must declare the import first, then the user defined functions and then your main code.

Here is an example to show the code structure:

```
import matplotlib.pyplot as plt
import math
#------------------------------------------------------------
def plotList(xs, ys):
plt.plot(xs, ys)
plt.show()
#------------------- The Main code ----------------------

years  = [2000,2001,2002,2003,2004,2005,2006,2007,2008,2009,2010,2011]
values = [math.pi,0.2,0.8,0.7,0.6,0.6,0.8,0.6,0.0,0.2,-1.0,0.8]
plotList(years, values)
```

Libraries first

Then the functions

The function call

Well done, you've completed this guided task!