# **Chapter 06 Labs**

## **Objective**

In this lab you'll gain some experience of using a few of Python's inbuilt functions.   
In this lab you'll write a function for calculating personal tax in UK.

## **Instructions**

The rules for simple tax calculation is 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%

## **Step-by-step instructions:**

1. Create a new file called **tax.py**
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**

**Libraries first**

**import math**

**#------------------------------------------------------------**

**def plotList(xs, ys):**

**Then the functions**

**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]**

**The function call**

**plotList(years, values)**

\*\*\* End \*\*\*