



## Chapter 06 Labs [REVISED]

### Objective

In this lab you'll write a function for calculating personal tax in the UK.

### Instructions

The rules for simple tax calculation is as follows:

- Up to £12,500 no tax
- £12,500 to £50,000 taxed at 20%
- £50,000 to £150,000 taxed at 40%
- Over £150,000 taxed at 45%

NB: The given tax rate is only applied to the salary amount within that band, e.g. you only pay 20% tax on the amount of your salary that lies between £12,500 and £50,000.

NB: **Ignore** the real-life complication that your personal allowance is reduced by £1 for every £2 you earn above £100,000.

### Step-by-step instructions:

1. Add a new file: **tax.py** and make it the startup file.
2. Define a function called **get\_income\_tax**, which receives a parameter called **salary**
3. To begin with, just make the function always return zero (0).
4. Write your main code to ask the user to input their salary, then call the **get\_income\_tax** function to calculate the tax due, and finally display to the user the result (the tax they have to pay).

```
salary = int(input("Enter annual salary: "))
tax = get_income_tax(salary)
print("Income tax due is £", tax)
```

5. Now improve the **get\_income\_tax** function, so it actually calculates the real income tax based on the tax calculation rules as seen above. NB: If it helps, consider defining and calling other helper functions, as you see fit.
6. Save, run and test your code.

```
Enter annual salary: 13500
Income tax due is £ 200
Press any key to continue . . .
```

7. Re-test your code with a set of different salaries. Expected results are as



follows (NB: you can't type the commas in, they're just there to make this information easier for you to read).

Salary	Tax
0	0
7,500	0
12,500	0
13,500	200
30,000	3,500
50,000	7,500
51,000	7,900
75,000	17,500
150,000	47,500
151,000	47,950
1,000,000	430,000