SCIT, University of Wollongong CSIT110/CSIT810 Autumn Session 2018

Assignment 4 (5%) due on **Sunday 15 April 2018 23:59PM**

Objectives

- Able to write clear code with comments and follow coding convention
- Able to get user input
- Able to translate string into integer and decimal numbers
- Able to use if-else statement
- Able to use numerical calculation

Instructions

Put all your python code into a single file and submit it via the eLearning site (Assignment 4 Submission on Moodle).

You may be asked questions about your code in the lab. Your **marks will be deducted** if you could not answer the questions presented by the tutors.

Late submissions will be marked with a 20% marks deduction for one day late, including weekend. Submissions more than 3 days late will not be marked.

If you need an extension, please apply for an Academic Consideration through SOLS on or before the assignment due date.

Plagiarism is treated seriously. If we suspect any work is copied, all students involved are likely to receive zero for the entire assignment.

Assignment questions.

Write clear code with **comments** and follow **coding convention**. Comments should include your name, student number and subject code on top of your code.

Question. Write a program to calculate the income tax based on the following tax rates.

FOR RESIDENTS

Taxable income	Tax on this income
0 - \$18,200	Nil
\$18,201 – \$37,000	19c for each \$1 over \$18,200
\$37,001 – \$87,000	\$3,572 plus 32.5c for each \$1 over \$37,000
\$87,001 - \$180,000	\$19,822 plus 37c for each \$1 over \$87,000
\$180,001 and over	\$54,232 plus 45c for each \$1 over \$180,000

FOR NON-RESIDENTS

Taxable income	Tax on this income
0 - \$87,000	32.5c for each \$1
\$87,001 - \$180,000	\$28,275 plus 37c for each \$1 over \$87,000
\$180,001 and over	\$62,685 plus 45c for each \$1 over \$180,000

FOR WORKING HOLIDAY VISA HOLDER

Taxable income	Tax on this income
0 - \$37,000	15c for each \$1
\$37,001 – \$87,000	\$5,550 plus 32.5c for each \$1 over \$37,000
\$87,001 - \$180,000	\$21,800 plus 37c for each \$1 over \$87,000
\$180,001 and over	\$56,210 plus 45c for each \$1 over \$180,000

Steps of the program:

- 1. The program should ask the user whether the user is a resident or not.
- 2. If the first answer is "No", then the program should ask the user whether the user holds a working holiday visa or not.
- 3. After that, the program should ask the user the taxable income (in dollars). Note that this taxable income is **an integer value**.
- 4. Then finally, the program outputs the income tax amount (in dollars). The tax amount should be round off to an integer value using the function **round** as described in the lecture.

Below are some examples of how your program should work. The text in **bold** indicates the user input.

```
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars): 18200
Your tax is: $0
Are you resident for tax purposes (Yes/No)?: Yes
Enter your taxable income (in dollars): 30000
Your tax is: $2242
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars):
Your tax is: $3572
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars): 50000
Your tax is: $7797
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars): 87000
Your tax is: $19822
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars):
Your tax is: $24632
Are you resident for tax purposes (Yes/No)?:
Enter your taxable income (in dollars): 180000
Your tax is: $54232
```

Are you resident for tax purposes (Yes/No)?: Yes Enter your taxable income (in dollars): 200000 Your tax is: \$63232

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: No
Enter your taxable income (in dollars): 50000
Your tax is: \$16250

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: No
Enter your taxable income (in dollars): 87000
Your tax is: \$28275

Are you resident for tax purposes (Yes/No)?: **No**Are you holding a working holiday visa (Yes/No)?: **No**Enter your taxable income (in dollars): **100000**Your tax is: \$33085

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: No
Enter your taxable income (in dollars): 180000
Your tax is: \$62685

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: No
Enter your taxable income (in dollars): 200000
Your tax is: \$71685

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 30000
Your tax is: \$4500

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 37000
Your tax is: \$5550

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 50000
Your tax is: \$9775

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 87000
Your tax is: \$21800

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 100000
Your tax is: \$26610

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 180000
Your tax is: \$56210

Are you resident for tax purposes (Yes/No)?: No
Are you holding a working holiday visa (Yes/No)?: Yes
Enter your taxable income (in dollars): 200000
Your tax is: \$65210

END OF THE ASSIGNMENT