

Practice problems for the CS50P Week 0

These are practice problems. For each problem create a directory with the problem name (title of the problem) and inside that folder create a Python file with the same name.

p0ap1func

Write a program that includes the following functions:

- `swap(a,b)` – takes two numbers and prints them in swapped order, separated by a comma.
- `hex_area(s)` – takes the length of a side and prints the area of a regular hexagon, rounded to two decimal places.
- `c_to_f(c)` – takes a temperature in Celsius and returns it as Fahrenheit.
- `is_leap(y)` – takes a year and returns True if it is a leap year; otherwise, it returns False.

Testing and submitting your code

```
check50 okskola/cs50addp/main/p0ap1func
submit50 okskola/cs50addp/main/p0ap1func
```

p0ap2fish

Task from Latvian 35th Informatics Olympiad warm-up competition.

There is an aquarium with a capacity of **T** liters, and it is completely filled with water. There are **F** fish swimming in the aquarium. For the fish to feel comfortable, each of them needs an average of **V** liters of water. Write a program that allows input of **T**, **F**, and **V** and outputs the smallest number of fish that need to be moved to another aquarium for the remaining fish to feel comfortable!

F is an integer, while **T** and **V** can be floating-point numbers with no more than six digits after the decimal point.

Examples

```
If T=100, F=30, V=3, then output=0
If T=101.99, F=8, V=51, then output=7
```

Testing and submitting your code

```
check50 okskola/cs50addp/main/p0ap2fish
submit50 okskola/cs50addp/main/p0ap2fish
```