

ACOM1900 – Introduction to Programming Data types Worksheet 2007/8

1. Write a program that converts a temperature in degrees Fahrenheit into Celsius (or degrees Centigrade). The formula is $c = \frac{5}{9} \times (f - 32)$.
2. Write a similar program that will convert a temperature in Celsius (or Centigrade) into Fahrenheit. In case you can't be bothered to work it out, the formula is $f = \frac{9}{5}c + 32$.
3. Write a program that prompts the user to enter five numbers and then displays the average (mean). When run, it might look like this:

```
cslin101% ./average.py
Enter the First Number: 1
Enter the Second Number: 2
Enter the Third Number: 2
Enter the Fourth Number: 2
Enter the Fifth Number: 2
The average is 1.8
```

Beware integer division!

4. * Write a program that would divide eggs into the customary boxes of 6. The program should prompt the user to enter the number of eggs, and should display how many full boxes there will be and how many eggs will be left over. Your output could resemble this:

```
cslin101% ./eggs.py
Enter the Number of Eggs: 12
There are 2 boxes, and 0 left over.
cslin101% ./eggs.py
Enter the Number of Eggs: 13
There are 2 boxes, and 1 left over.
cslin101% ./eggs.py
Enter the Number of Eggs: 0
There are 0 boxes, and 0 left over.
```

Assume that the value entered is always a positive integer.