

Assignment 1

Due Noon Tuesday September 8

The purpose of this assignment is to give you practice in writing a C program using `printf`, `scanf` and arithmetic expressions.

Instructions

Zululand has a congress with in theory 97 seats. These are apportioned among the three states Alpha, Bravo and Charlie in proportion to their population. To be precise, each state receives its share rounded down to the nearest whole number, even if this means the total is less than 97. Write a C program to compute the seats as follows:

1. Prompt the user for the population of Alpha, then of Bravo, and then of Charlie.
2. Calculate the total population of Zululand.
3. Calculate the percentages for each state.
4. Calculate the number of seats for each state.
5. Print out the results in a suitable format.

Sample Run

(In preparing the handout, I converted user input to italics)

```
Enter population of Alpha: 123
Enter population of Bravo: 234
Enter population of Charlie: 345
```

```
Total population is 702
Alpha has 17.52% of the population and 16 seats
Bravo has 33.33% of the population and 32 seats
Charlie has 49.15% of the population and 47 seats
Total seats allocated is 95
```

Requirements

1. Save your code as `zululand.c`
2. Submit your source code using: `handin.101.303 1 zululand.c`
(like, but not the same as, `sendlab`)

You are to work independently, but can ask questions from the lecturer, lab instructors and helpdesk. Programs must be submitted on time.