

Purpose: In this assignment we will be learning assembly instructions to work with arrays of data, loops, and conditionals.

The assembly program must be written from scratch.

All data in the program should be stored as **unsigned word sized integers**.

Instructions

Your company is hosting an employee appreciation luncheon and needs to know how many pizzas to order. A text file with the number of employees in each department has been provided (department headcounts.txt).

Each employee is to be allocated three slices of pizza. Each pizza has 8 slices. Pizzas must be ordered per department, rounding up as necessary.

Determine the number of pizzas required per department and store the values in a separate array. Calculate the total pizzas required for the luncheon and the average number of pizzas per department (rounded down) and store those values in their own variables.

Write a source file for the debugger that will display the total pizzas needed by each department, the total pizzas required overall, and the average pizzas required per department (see example output).

Submission

Once you are satisfied with the program, upload the assembly source code (.asm) file to the assignment #3a page on the class website. Submit the debugger source file to assignment #3b.

Example Output

```
Pizzas Required Per Department:
0x600140:    17   82   8   389 153 3   303 210
0x600150:     1   36
Total Pizzas Required:0x600154:   1202
Average Pizzas Required:0x600156: 120
```
