

## Instructions

For each of the following 4 problems provide:

1. inputs
2. outputs
3. error conditions
4. an algorithm using pseudocode
5. the minimum and the maximum number of operations
6. a set of test cases

### 1. Multiplication

Compute and display the result of how much a certain number of pounds of apple costs.

### 2. Gas

Compute and display the price a person will pay for gas at the gas station. If the person pays with a credit card, there is an extra charge of 10% of the total price.

### 3. University tuition

Compute the tuition a student pays at an university, given the following rules:

- Every student pays a campus fee of \$6.87
- Each one credit costs \$20
- An university employee pays only campus fee
- State employee pays campus fee + 10% of total number of credits cost
- Assume a student cannot be an university employee and a state employee at the same time
- A student paying in installments pays an additional 3% of total amount owed

### 4. Zoo census

There are a number of zoos in the United States. Each of these zoos is a home to giraffes, lions and snakes. Determine and display the total number of each (giraffes, lions, and snakes) in the zoos in the United States. Assume positive values.

## Submitting

Submit your answers in a PDF file called assign1.pdf in Sakai under Written Assignments. Use your preferred text editor to type your answers, and then save the file in PDF format.

You must upload your file, and then click the **Submit** button. If you don't click the button we don't have your assignment.