

# “ReciCalc”

Your friend has the hottest new bistro in town - everybody's talking about its fancy new Wellness Policy where menu items that have organic ingredients in them get a nice discount. Since many people are interested in their health, consuming organic foods, saving the Earth or a combination thereof his sales have skyrocketed. He's able to offer that discount because of a deal with a local farmer's cooperative that gives him a 5% discount on any organic items he sources through them.

However, with the added customer inflow your friend is struggling to cope with some aspects of his business and one of them is figuring out how much he's paying for his recipes. Since you think that's pretty important and being the good friend that you are you offer to write him a simple application that will take care of that.

## Assignment

Using any language that your are familiar with build a working application - tests included - that users can use to register ingredients, recipes and then calculate:

- Total Price
  - Sum of the prices of each ingredient at the quantities required by the recipe
- The Sales Tax
  - 8.6% of the Total Price rounded up to the nearest 7 cents.
  - Does not apply to Produce
- Wellness Discount
  - 5% of the Total Price rounded up to the nearest cent
  - Applies only to Organic Items
- Total Cost
  - Total Price + Sales Tax - Wellness Discount

Examples:

## Ingredients

- Produce
  - 1 clove of Organic Garlic - \$0.67
  - 1 Lemon - \$2.03
  - 1 Cup of Corn - \$0.87
- Meat / Poultry
  - 1 Chicken Breast - \$2.19
  - 1 Slice of Bacon - \$0.24
- Pantry
  - 1 ounce of Pasta - \$0.31
  - 1 cup of Organic Olive Oil - \$1.92
  - 1 cup of Vinegar - \$1.26
  - 1 teaspoon of Salt - \$0.16
  - 1 teaspoon of Pepper - \$0.17

## Recipes

- Salad Dressing
  - 1 clove of Organic Garlic
  - 1 Lemon
  - $\frac{3}{4}$  cups of Organic Olive Oil
  - $\frac{3}{4}$  teaspoons of Salt
  - $\frac{1}{2}$  teaspoons of Pepper
- Healthy Chicken Breast
  - 1 clove of Organic Garlic
  - 4 Chicken Breasts
  - $\frac{1}{2}$  cups of Organic Olive Oil
  - $\frac{1}{2}$  cups of Vinegar
- Pasta Fiesta
  - 1 clove of Organic Garlic
  - 4 cups of Corn
  - 4 slices of Bacon

- 8 ounces of Pasta
- $\frac{1}{3}$  cups of Organic Olive Oil
- 1  $\frac{1}{4}$  teaspoons of Salt
- $\frac{3}{4}$  teaspoons of Pepper

**Costs:**

- Salad Dressing:
  - Sales Tax: \$0.21
  - Wellness Discount: (\$0.11)
  - Total Cost: \$4.45
- Healthy Chicken Breast
  - Sales Tax: \$0.91
  - Wellness Discount: (\$0.09)
  - Total Cost: \$11.84
- Pasta Fiesta
  - Sales Tax: \$0.42
  - Wellness Discount: (\$0.07)
  - Total Cost: \$8.91

**OBS:**

- The User needs to input Ingredients and Recipes
- The User needs to get a cost breakdown for any given Recipe
- The application should have tests
- Approach this problem from a professional viewpoint as if it came from a paying customer