COMP110
Code Writing Practice

These questions refer to the Recipe and RecipeBox classes found on the supplemental pages.

1. Write the code to implement the Recipe constructor.

2. Write the client code to declare a variable that refers to a Recipe object and construct and initialize the object with the following information:
   name: “Chicken Soup”
   contributor: “Grandma Kay”
   category: “entrée”
   time: 60
   instructions: assume that the instructions are in a String called soupInstr

3. Write the client code to print the name of the Recipe object you constructed above, using the appropriate method (i.e., do not just print “Chicken Soup”).

4. Write the code for the Recipe method getName, which returns the name of the Recipe object.

5. Write the code to implement the RecipeBox constructor.

6. Write the code for the RecipeBox method addRecipe, which adds the specified Recipe object to the collection of recipes.

7. Write the code for the RecipeBox method printBasics, which prints the recipe name, followed by the contributor and cook time, for all recipes in the box. (Note that this function does not print the category or the instructions.) Use spaces and line breaks to make your output legible.

8. Write the code for the RecipeBox method numberBy, which returns the number of recipes in the box by the specified contributor.

9. Write the code for the RecipeBox method getContributor, which returns the contributor of the recipe whose name is provided. If there is no recipe matching the specified name, the method should return a null string.

10. Write the code for the RecipeBox method quickestInCategory, which returns the name of the recipe in the box with the shortest cooking time. If there are no recipes in the box, or if there are no recipes in the specified category, this method should return a null string. If there is more than one recipe with the shortest time, you may return any one of them (whichever you find easiest).
11. Write the code for the RecipeBox method `allRecipesBy`, which returns an ArrayList containing all of the recipes by the specified contributor. If there are no recipes by this contributor, the method should return an empty ArrayList.