Lab 12 - Assignment

Exception Handling

CS 112 – Summer 2022

Description

It's Charlie Brown's birthday and Snoopy is organizing a party. He plans to give pizza to the guests. Each pizza is going to be cut into 8 slices and he wants the guest to have at least one slice. Snoopy needs to know the minimum number of pizzas that he must buy.

Woodstock plans to buy a 2-pound cake for the party. The whole cake will be divided into equal portions for each of the guests. A normal slice of cake is usually between 5 and 6 oz. Woodstock wants to know if the guests would get a smaller slice than usual, and if so, he plans to buy an extra cake.

Snoopy and Woodstock need your help to collect party data and answer their questions and additional information.

Inquire:

How many people would be at the party?

Requirements:

- Define a function def party (people): to handle the following exceptions:
 - Number of people must be an integer, otherwise the error is handled with the message "Err! Input must be int"
 - Be sure that the value is not a negative one, otherwise raise an error with the message "Err! Input is a negative value".
 - When calculating the portion cake avoid division by zero, if so, handle the error with as x, and show the details of the error.

Output:

- How many pizzas Snoopy should buy so that all the guests can get at least one slice?
- What percentage of the last pizza is left?
- What is the portion of cake (in ounces) that a guest would receive?
- In case the portion is smaller than usual display "another cake must be purchased!"

NOTE: All floats must be rounded to 2 decimal places.

Example:

How many people would be at the party? 13 Snoopy must buy at least 2 pizzas 37.5% of the last pizza is left

The slice of cake for each guest would be 2.46oz, another cake must be purchased!

Allowed things:

- Any arithmetic operators are all fine
- Any relational operator is allowed
- All functions and methods covered in class are allowed

Disallowed things:

No hard coding