

1) Test the below concepts by writing necessary classes and methods

- a. Single try.. catch.. finally block.
- b. Multiple catch block
- c. Nested try catch blocks
- d. Usage of throw and throws keywords.

2) Create a checked exception `InvalidRangeException`. Override all the constructors from the super class

3) Create a `RuntimeException` `InvalidInputException`. Override all the constructors from the super class

4) Create the below two classes. `DataCollector` class is dependent on `StatisticalUtility` class to get the average of the data collected from user.

DataCollector	StatisticalUtility
<p>Public in <code>getResult(int data[], int min, int max, int v1, int v2)</code> throws <code>InvalidInputException</code></p> <p>Responsibility:</p> <p>This method accepts list of integers, minimum value, maximum values,. Pass these three value, maximum values. Pass these three values to the <code>getAve</code> get average.</p> <p>Return the result by using the below formul;a <math>result = (average * v1) / v2</math></p> <p>In case of <code>InvalidRangeException</code> throw <code>InvalidInputException</code> by wrapping <code>InvalidRangeException</code></p>	<p>Public int <code>getAverageValue(int data[], int min, int max)</code> throws <code>InvalidRangeException</code>.</p> <p>Responsibility:</p> <p>This methods accepts array of integers(data) and two integers (min and max).</p> <p>Methjods returns average of all the elements of the data array only if the average value is in between min and max values.</p> <p>If the average value is outside the range of min and max the throw <code>InvalidRangeException</code>.</p>

Create the Main class for accepting the data from the user and call the methods on Data Collector object. In case of any exceptions catch the exceptions and display the appropriate message to the user.

5) In question No. 4 modify the interface definition as mentioned below.

## Storage Interface

Void addNewPizza(Pizza e) throws PizzaAlreadyExistException

Pizza getPizzaByName(String pizzaname) throws PizzaNotFoundException

Pizza[] getPizzaByName(String pizzaname) throws NoPizzaFoundException

- While adding the Pizza in the array if the Pizza with the same name already exists in the array then raise PizzaAlreadyExists Exception
- In the search operation if the Pizza is not found then raise NoPizza FoundException.

Modify other classes accordingly.