

- 1) Test the below concepts by writing necessary classes and methods.  
 Single try..catch..finally block  
 Multiple catch block  
 Nested try catch blocks  
 Usage of throw and throws keywords.
- 2) Create a checked exception `InvalidAgeException`. Override all the constructors from the super class.
- 3) Create a `RuntimeException` `WrongInputException`. Override all the constructors from the super class.
- 4) Create the below two classes. `LearningModule` class is dependent on `AgeValidator` class to check whether the age is valid or not.

#### LearningModule

`Public String getLearningCode(String Name,age) throws WrongInputException.`

##### **Responsibility:**

This method accepts Name and age of the person and returns generates a learning code by concatenating name and ageCode. (call `getAgeCode` from `AgeValidator` to get age code)  
 In case of `InvalidAgeException` throw `WrongInputException` by wrapping `InvalidAgeException`.

#### AgeValidator

`Public String getAgeCode(int age) throws InvalidAgeException.`

##### **Responsibility:**

This method accepts age and returns "Adult" if the age is greater than 18 and returns "kid" if the age is between 0 10 18. If the age is less than 0 then throw `InvalidAgeException`.

Create the Main class for accepting the data from the user and call the methods on `LearningModule=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 addEmployee(Employee e) throws EmployeeAlreadyExistsException`  
`Employee getEmployee(int empno)) throws EmployeeNotFoundException`

- While adding the employee if the employee with the same id already exists in the array Raise `EmployeeAlreadyExistsException`
- While searching if the Employee with the given empno is not found in the array then raise `EmployeeNotFoundException`.

Modify other classes accordingly.

