

Practice **Create and Implement a User- Defined Exception**

Practice

- Identifying Insufficient Funds



Implementation Environment

- The practice or challenge must be done in the IntelliJ IDE.
- Click here to install [IntelliJ](#)
- You must have access to [GitLab](#).
- Install [git](#) to be able to clone and push code to the repository.
- You must be familiar with forking and cloning a git repository.

Implementation Environment

- Cloning a repository from git
 - After forking the boilerplate into your namespace, execute the below command on git bash or command prompt to clone the repository into your local machine.

```
git clone <repository link>
```

- Push the solution back to git
 - After completing the practice, push the code back to git using the below commands.

```
git add .  
git commit -m "comments on the push"  
git push -u origin master
```



An illustration of a woman with dark hair and glasses, wearing a red top, and a man with brown hair and glasses, wearing an orange top. They are sitting at a light blue desk with a large blue computer monitor. The woman is holding a yellow clipboard. On the desk, there is a white coffee cup with a red lid, a yellow pencil, and a notepad with a red pencil. The background is light green with some abstract shapes and a large green plant on the right.

PRACTICE

Identifying Insufficient Funds

David has a savings bank account. He believes he has sufficient money in his account to make an investment. So, he signs a cheque for a certain amount and gives it to the investment company. However, when the company deposits the cheque in its account to withdraw the aforesaid amount, the cheque bounces due to insufficient funds. David receives a message from the bank stating, "Insufficient balance in the account."

Instructions for the Practice

- Click here for the [boilerplate](#).
- Fork the boilerplate using the fork button 
- Select your namespace to fork the project.
- Clone the project into your local system.
- Open the project in the IntelliJ IDE.
- Work on the solution.
- Execute the test cases given in the test folder.
- Push the solution to git.

Tasks

- Write all the logic for the program inside the `Account` and `InsufficientFundException` classes provided in the boilerplate:
- The `InsufficientFundException` class is the user-defined exception class.
- The `Account` class contains the method `withdraw()`, which will return the new balance after deducting the withdrawal amount from the balance
- The method must throw an `InsufficientFundException` when the amount to withdraw is greater than the available balance.

```
public double withdraw(double amount) throws InsufficientFundException
```

- Write try and catch blocks to handle user-defined exceptions.