**Rabobank Customer Statement Processor**

Rabobank receives monthly deliveries of customer statement records. This information is delivered in two formats, CSV and XML. These records need to be validated.

**Input**

The format of the file is a JSON format. The input will be provided as a JSON file. The format is as follows:

| **Field** | **Description** |
| --- | --- |
| Transaction reference | A numeric value |
| Account number | An IBAN |
| Account | IBAN |
| Start Balance | The starting balance in Euros |
| Mutation | Either and addition (+) or a deducation (-) |
| Description | Free text |
| End Balance | The end balance in Euros |

**Validations:**

There are two validations:

1- All transaction references should be unique

2 -The end balance needs to be validated

On completion of processing, a report needs to be created which will display both the transaction reference and description of each of the failed records.

**Steps to run the application**

1. Clone the project RabobankCSP (Spring boot project) from below mentioned git repository URL.

git clone https://github.com/shanthakumar512/rabobank.git

2. Run maven command to install dependency.

3. Compile and run the project as SpringBootApplication.

4. This Web service application have one active service to process JSON files. Please find service URL below,

<http://localhost:8080/rabobank/processStatement>

5. Upload input JSON file as specified in the service using postman client.

6. The input file will be validated based on two conduction mentioned in the problem statement. (validation condition mentioned in expected output section)

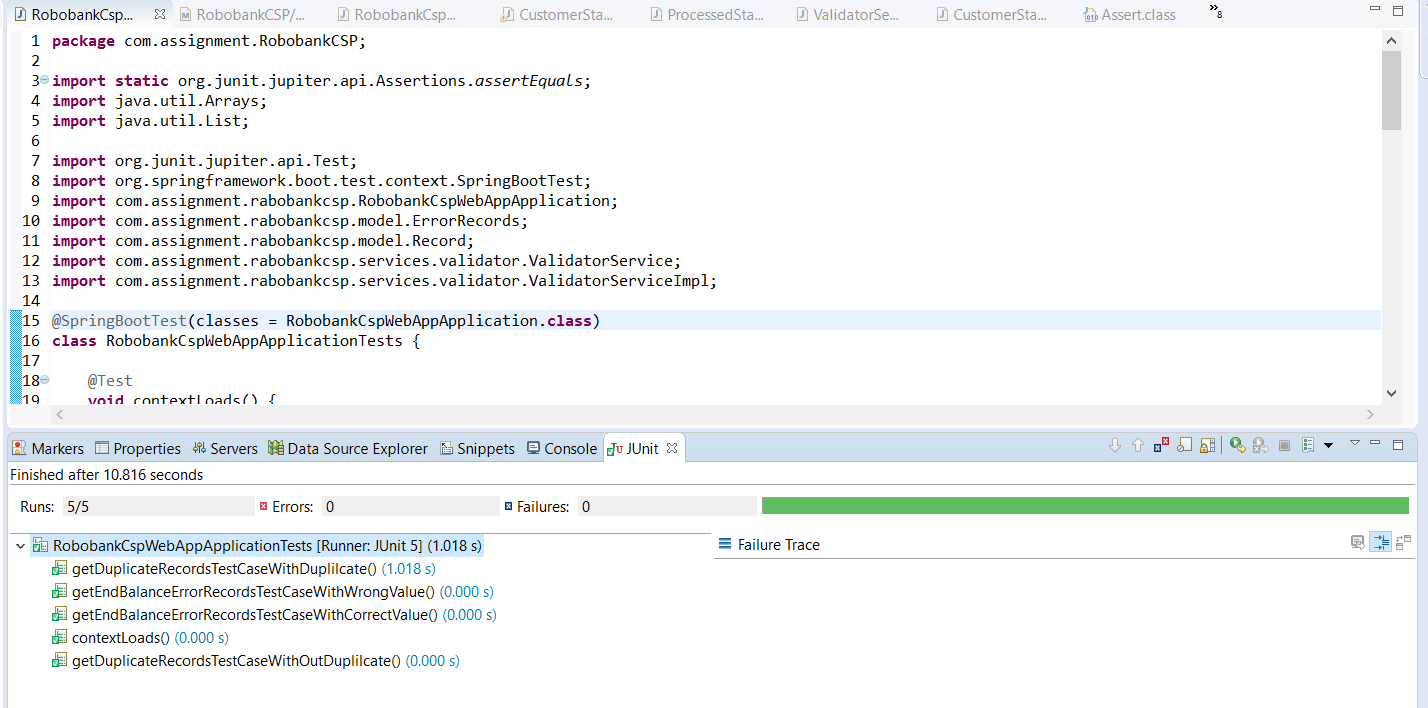
* + - Duplicate Transaction key check,
    - End balance calculation check

7. Finally invalid records will be returned in the response in given format

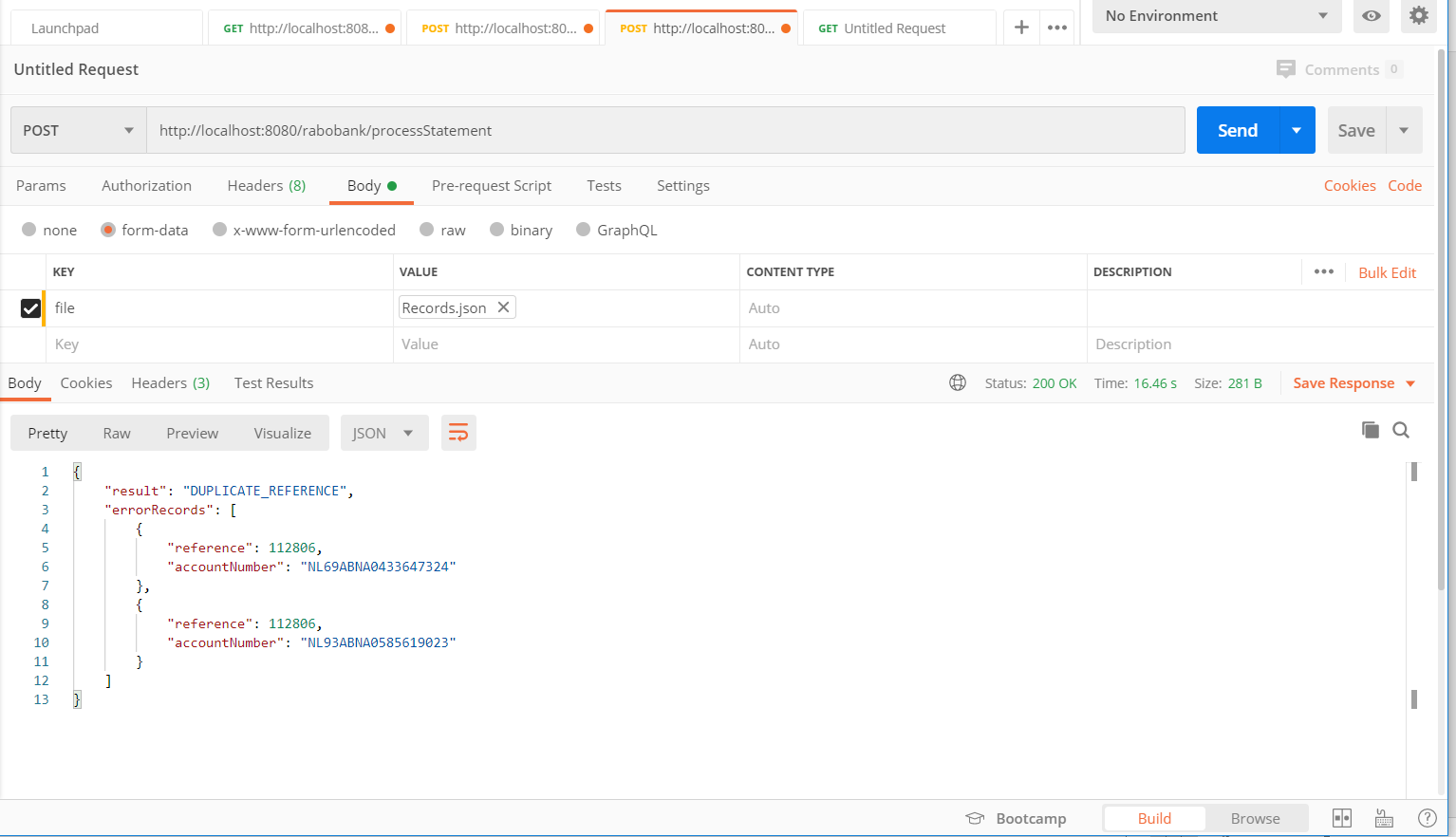
**Test Cases:**

Created test cases for all service classes in the application included in ( /RobobankCSP/src/test/java/com/assignment/robobankcsp/RobobankCspWebAppApplicationTests.java ).

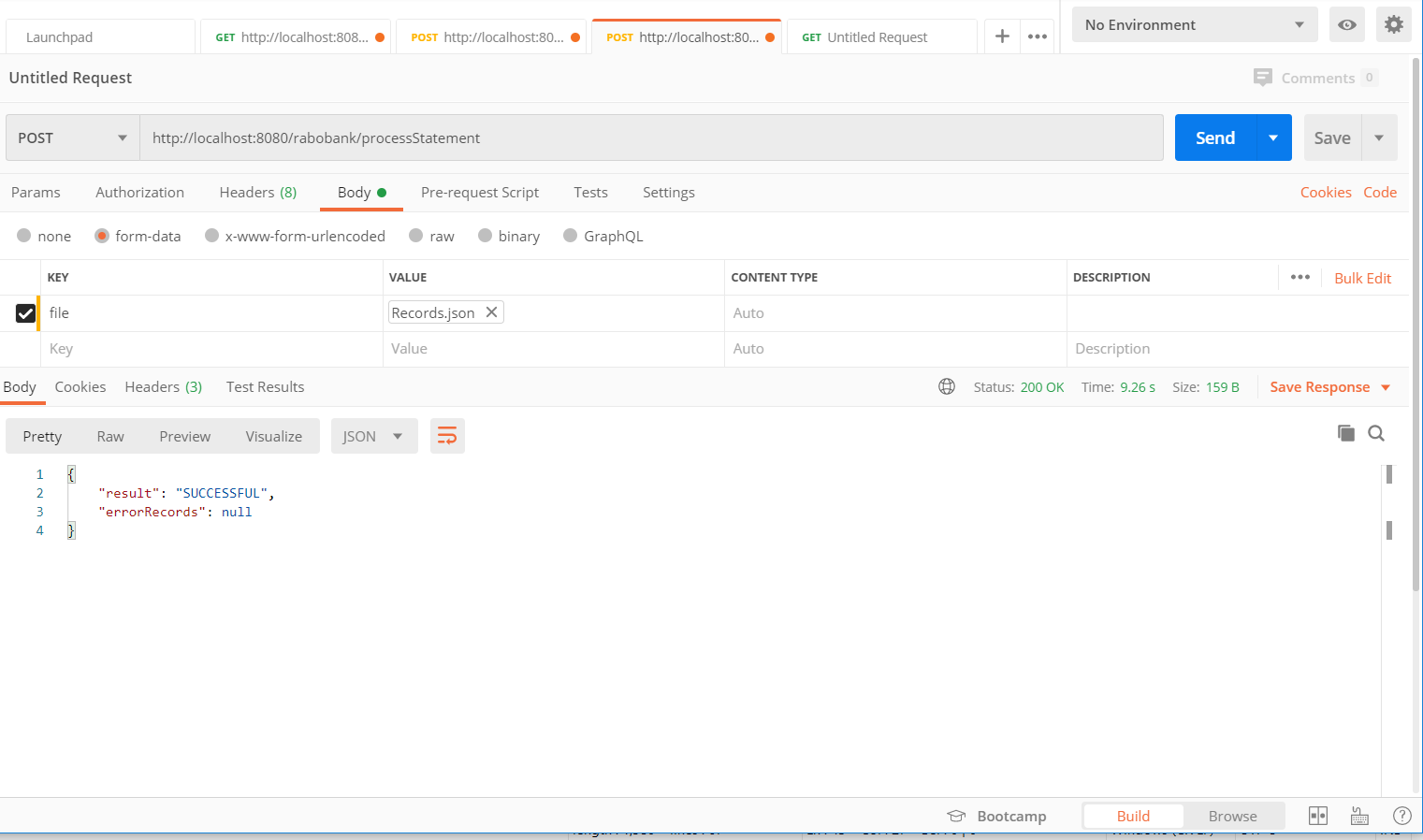
PFB the test result.



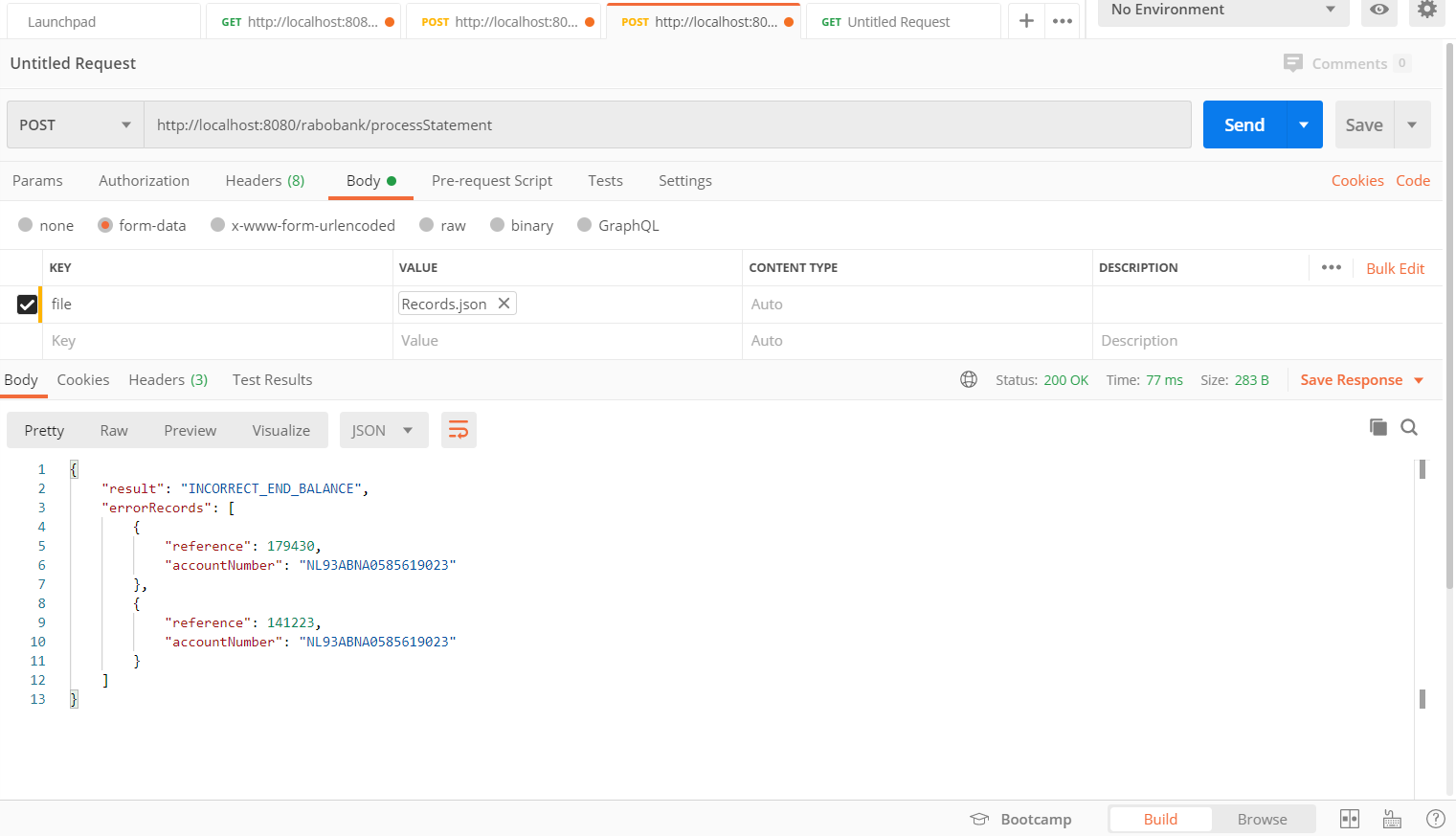
Postman Client Validation Screenshots:



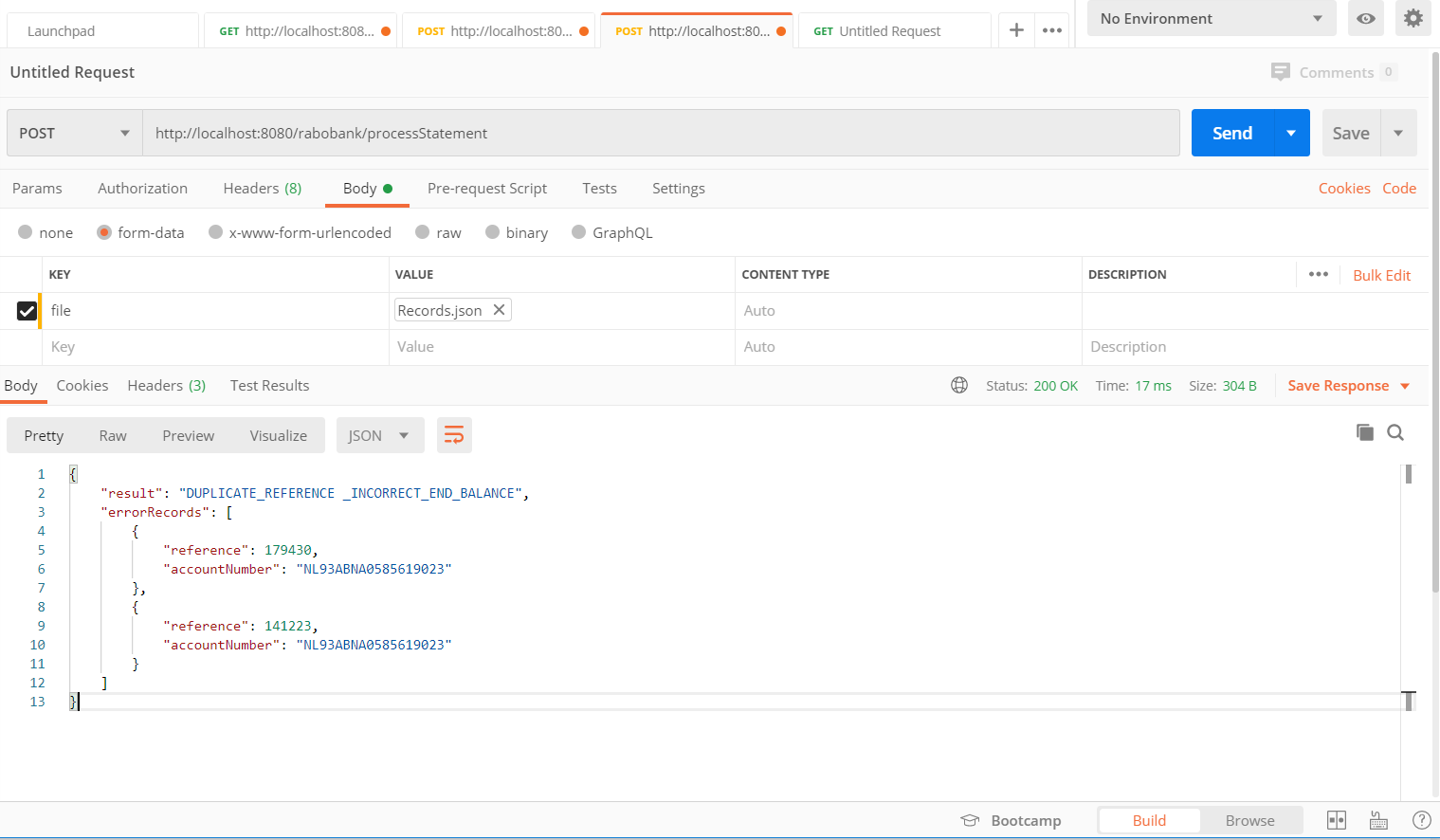
All Unique Reference:



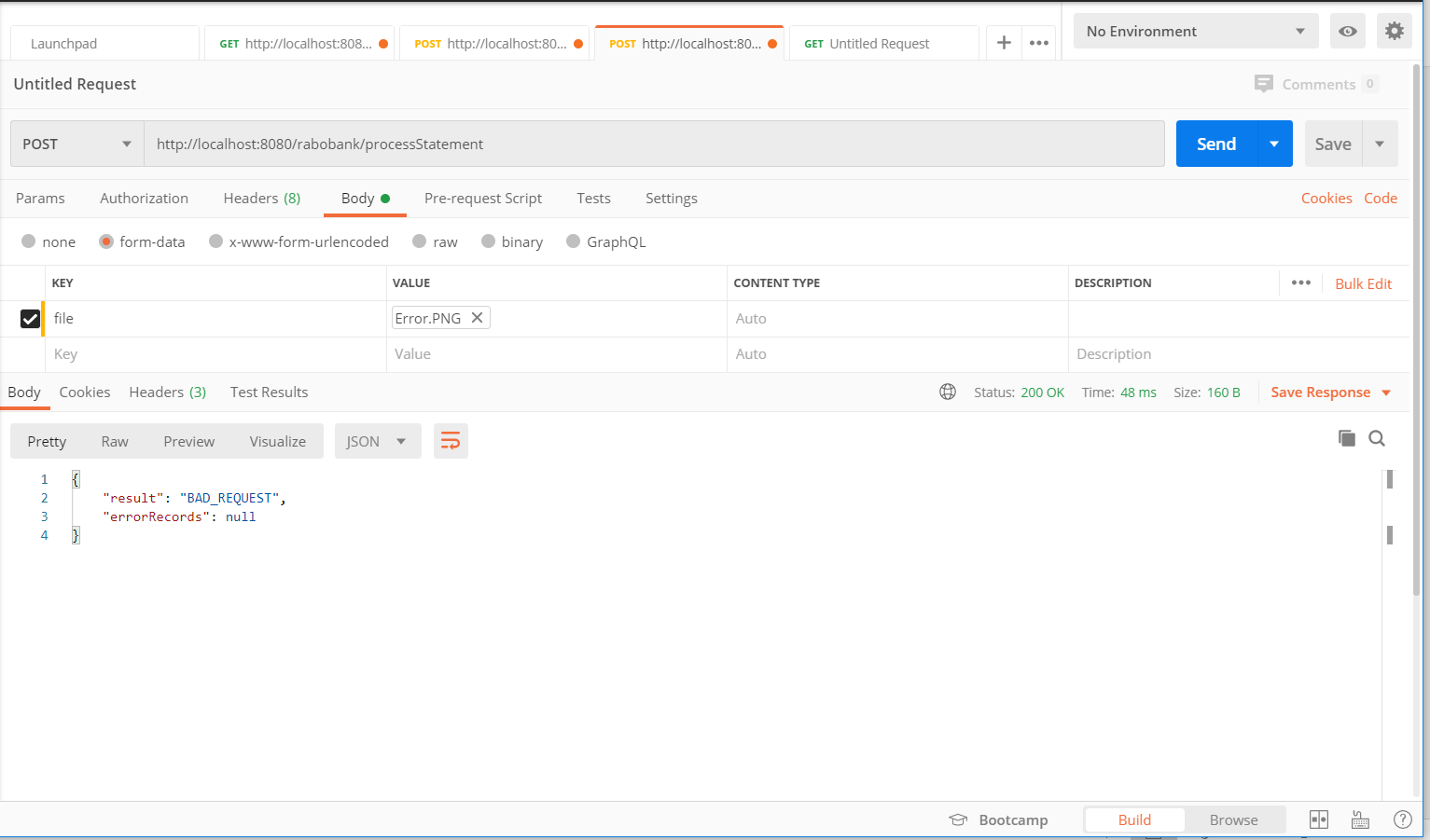
Records with End balance issues:



Records having duplicate and End Balance issues



Error on passing files types other than Json



Other Errors in Request

