

# 1.Experimental Setup and Data

## 1.1 Dataset

Source: Downloaded the receipts.zip file from Google Drive  
Content: 7 receipt images (receipt1.jpg to receipt7.jpg)  
Format: JPEG format, containing complete receipt information

## 1.2 Test Queries

Query 1: "How much money did I spend in total for these bills?"  
Query 2: "How much would I have had to pay without the discount?"  
Irrelevant Query Test: "123" (any non-relevant string)

## 1.3 Evaluation Metrics

Accuracy: Absolute error between calculated total and actual value  
Tolerance Range:  $\pm \$2$  (considering reasonable error margin for receipt recognition)  
Rejection Rate: Proportion of irrelevant queries correctly rejected

# 2.Experimental Results and Analysis

## 2.1 Accuracy Test Results

Query Type	Expected Total (USD)	System Output (USD)	Absolute Error	Pass/Fail
Query 1	1,974.3	1,974.3	0.0	✓
Query 2	2,348.2	2,348.2	0.0	✓

Detailed Receipt Parsing Results:

Receipt No.	Actual Payment (USD)	Original Price (USD)
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Receipt No.	Actual Payment (USD)	Original Price (USD)
1	394.7	480.20
2	316.1	392.20
3	140.8	160.10
4	514.0	590.80
5	102.3	107.70
6	190.8	221.20
7	315.6	396.00
Total	1,974.3	2,348.2

## 2.2 Rejection Mechanism Test

Test Query	Expected Behavior	Actual Behavior	Result
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Test Query	Expected Behavior	Actual Behavior	Result
"123"	Reject and return prompt message	"I can only answer questions about receipt totals."	✓
"What is the weather?"	Reject	Same rejection response	✓
"Tell me a joke"	Reject	Same rejection response	✓

### 2.3 Performance Analysis

Processing Speed: Average 2-3 seconds per receipt parsing

API Calls: 7 receipts + intent recognition = 8 calls

Resource Usage: Stable memory consumption, no significant peaks

Error Recovery: Failure in parsing a single receipt does not affect overall process