**RSSB – TECHNICAL EVALUATION – ANSWERS**

**Test 1. Black Box Testing**

- Test plan => Shared separately as **Word Doc. [FB Test Plan]**

- Test case => Shared separately as **Excel Sheet. [FB Test Cases]**

- Automated test => Shared separately as **Folder. [rssbEvaluation]**

**Test 2. White Box Testing**

1. **Potential bugs or issue**

* The codes simply cannot run
* It has no validations

1. **Improvement for efficiency**

* Should be in the main function
* Should be refactored and add in call functions

1. **To ensure codes work as expected**

* Should run a unit test
* Implement validations

**Test 3. SQL Skills**

1. SELECT \* FROM customers WHERE name LIKE 'S%' AND address='New York';
2. SELECT department, avg(salary) from employees GROUP BY department ORDER BY avg(salary) DESC;
3. SELECT customer\_id, COUNT(\*) AS count FROM orders GROUP BY customer\_id ORDER BY count DESC;
4. SELECT product\_id, product\_name, SUM(sales\_total) AS total\_sales FROM sales GROUP BY product\_id;
5. SELECT customer\_name, customer\_id, AVG(order\_total) FROM orders GROUP BY customer\_name, customer\_id;
6. SELECT c.name AS category, p.name AS product, SUM(s.sales) AS total\_sales

FROM categories c

INNER JOIN products p ON p.category\_id = c.id

INNER JOIN sales s ON s.product\_id = p.id

GROUP BY p.category\_id

ORDER BY total\_sales DESC

LIMIT 1;

1. SELECT YEAR(orderDate), AVG(amount) FROM orders GROUP BY YEAR(orderDate);
2. SELECT quarter, SUM(sales) FROM sales\_report GROUP BY quarter;
3. SELECT day, SUM(sale\_amount) FROM sales GROUP BY day;
4. SELECT product, month, SUM(sales) as total

FROM table\_name

GROUP BY product, month

**Test 4. Agile Testing**

The file is shared separately as an **Excel sheet. [ChatBot Test Plan]**

**Test 5. Analytical Mindset and Aptitude**

1. The program incorrectly calculates the total cost of a purchase **==> 1**

* I rank this issue number one because it can cause damage not only to the software itself but to the user and it can cause a big loss to a business.

2. The program sends an email to a wrong recipient **==> 2**

* I rank this the second because it can cause security issue by sending confidential information to wrong people and that can be a big information leakage.

3. The program crashes when a user inputs an invalid date **==> 3**

* I rank this third cause it a big problem to have a program that crashes being used by users.

4. The user is unable to login with a password that contains special characters **==> 4**

* I rank this fourth because if it is a login, means a user once was able to login, it is an issue that can cause a use to be unhappy or terminate with the software.

5. The program displays a "Loading" message indefinitely **==> 5**

* I rank this fifth cause it is not a good experience to the user but It can be easily fix by the user