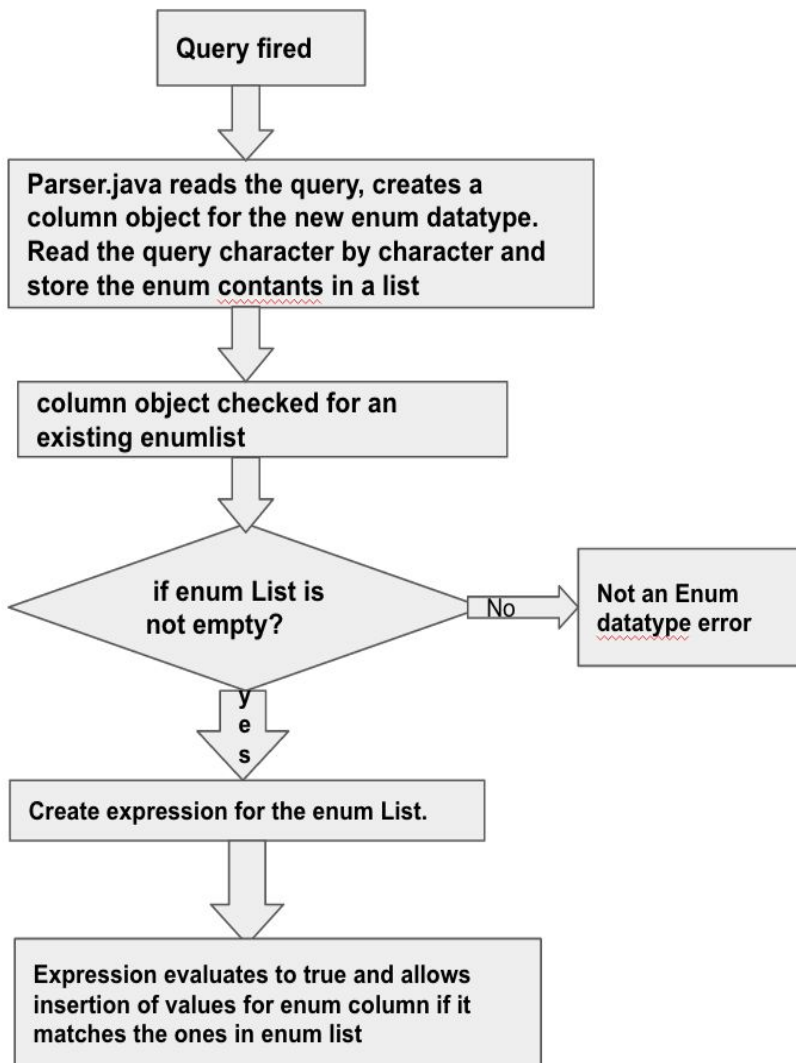


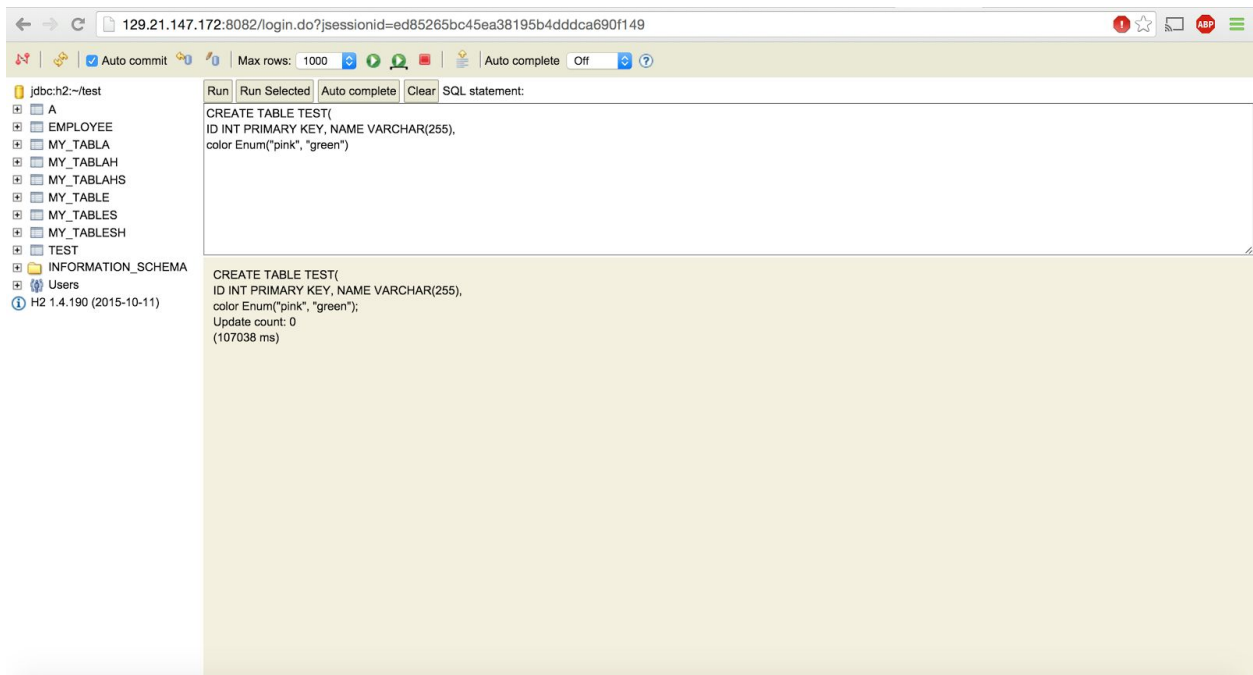
Design for Enum Feature:

Following is the design for Enum algorithm. The detailed implementation is explained in the report.



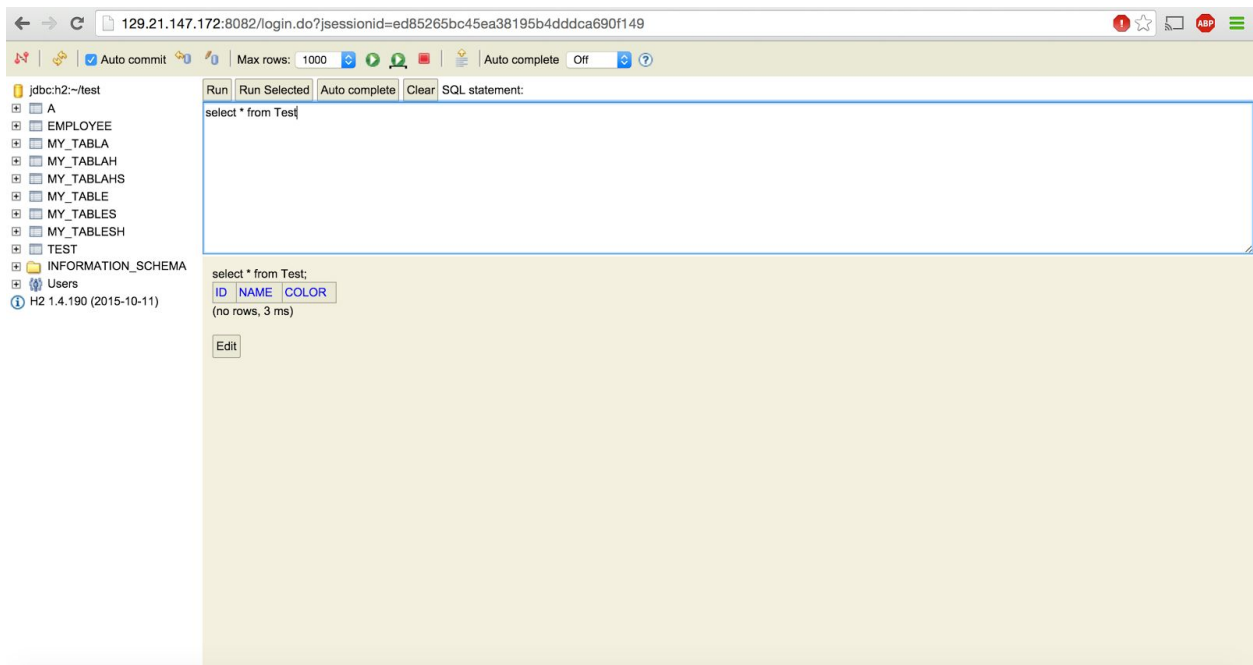
Screenshots for Enum Feature

1



Create table with Enum

2.



Select Query for Enum

3.

The screenshot shows a web browser window with the URL `129.21.147.172:8082/login.do?jsessionid=ed85265bc45ea38195b4dddca690f149`. The interface includes a sidebar on the left with a tree view showing the database structure: `jdbc:h2:~/test`, `A`, `EMPLOYEE`, `TEST`, `INFORMATION_SCHEMA`, and `Users`. The main area has a top bar with buttons: `Run`, `Run Selected`, `Auto complete`, and `Clear`, along with a text input for the `SQL statement:`. Below this, the SQL statement `SELECT * FROM TEST` is entered. The results are displayed in a table with columns `ID`, `NAME`, and `COLOR`. The table contains two rows: `100 SAMYUKTA (pink)` and `200 AMRUTA (green)`. Below the table, it indicates `(2 rows, 1 ms)` and an `Edit` button.

ID	NAME	COLOR
100	SAMYUKTA	(pink)
200	AMRUTA	(green)

Inserted couple records and fired select query again

4.

The screenshot shows the same web browser window as before. The `SQL statement:` input field now contains `INSERT INTO TEST VALUES(300,'SAURABH','pink')`. The interface elements, including the sidebar and top bar, remain the same.

Insert Query to insert values for Enum

5.

The screenshot shows a web browser window with the URL `129.21.147.172:8082/login.do?jsessionId=ed85265bc45ea38195b4dddca690f149`. The interface includes a sidebar with a tree view of the database structure: `jdbc:h2:~/test`, `A`, `EMPLOYEE`, `TEST`, `INFORMATION_SCHEMA`, `Users`, and `H2 1.4.190 (2015-10-11)`. The main area has a toolbar with buttons: `Run`, `Run Selected`, `Auto complete`, and `Clear`. Below the toolbar, the SQL statement `INSERT INTO TEST VALUES(300,'SAURABH','pink')` is entered. The execution result shows the statement was run successfully, with an update count of 1 and a duration of 3 ms.

```
INSERT INTO TEST VALUES(300,'SAURABH','pink');
```

Update count: 1
(3 ms)

Insert Query to insert values for Enum

6

The screenshot shows the same web browser window and interface as in the previous image. The SQL statement `SELECT * FROM TEST` is entered. The execution result displays a table with 3 rows and 3 columns: `ID`, `NAME`, and `COLOR`. The data rows are: `100 SAMYUKTA (pink)`, `200 AMRUTA (green)`, and `300 SAURABH (pink)`. The execution took 5 ms.

```
SELECT * FROM TEST;
```

ID	NAME	COLOR
100	SAMYUKTA	(pink)
200	AMRUTA	(green)
300	SAURABH	(pink)

(3 rows, 5 ms)

`Edit`

Select Query for Enum

7.

The screenshot shows a web-based SQL client interface. The browser address bar displays the URL: 129.21.147.172:8082/login.do?sessionId=ed85265bc45ea38195b4dddca690f149. The interface includes a sidebar with a tree view showing the database structure: jdbc:h2:~/test, A, EMPLOYEE, TEST, INFORMATION_SCHEMA, Users, and H2 1.4.190 (2015-10-11). The main area has a 'SQL statement:' input field containing a bulk insert query:
`INSERT INTO TEST VALUES(400,'PURI','pink');
INSERT INTO TEST VALUES(250,'CHAVAN','green');
INSERT INTO TEST VALUES(150,'RODE','green');
INSERT INTO TEST VALUES(350,'BHARADWAJ','pink');`
Below the input field, the execution results are displayed, showing the execution of each insert statement with its update count and execution time:
`INSERT INTO TEST VALUES(400,'PURI','pink');
Update count: 1
(2 ms)

INSERT INTO TEST VALUES(250,'CHAVAN','green');
Update count: 1
(1 ms)

INSERT INTO TEST VALUES(150,'RODE','green');
Update count: 1
(4 ms)

INSERT INTO TEST VALUES(350,'BHARADWAJ','pink');
Update count: 1
(1 ms)`

Bulk insert to insert multiple records at a time

8.

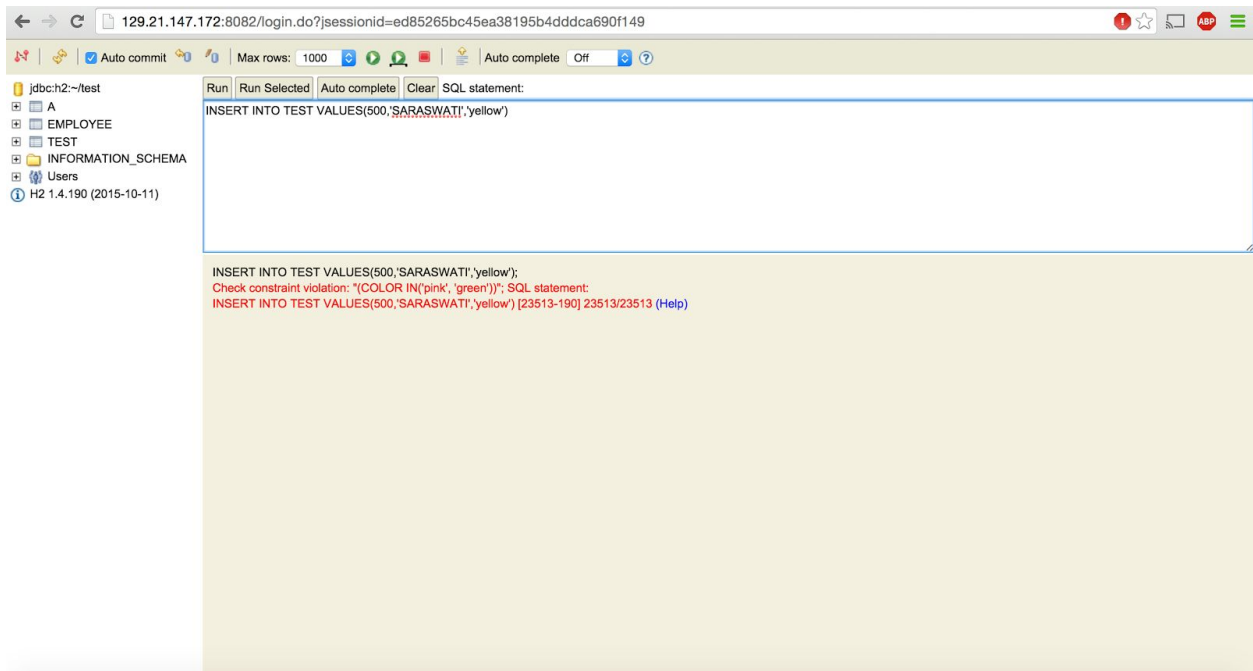
The screenshot shows the same web-based SQL client interface. The 'SQL statement:' input field now contains the query: `SELECT * FROM TEST`. The execution results are displayed as a table with 7 rows and 3 columns: ID, NAME, and COLOR. The table contains the following data:

ID	NAME	COLOR
100	SAMYUKTA	(pink)
150	RODE	(green)
200	AMRUTA	(green)
250	CHAVAN	(green)
300	SAURABH	(pink)
350	BHARADWAJ	(pink)
400	PURI	(pink)

Below the table, the execution summary is shown: (7 rows, 3 ms). An 'Edit' button is located below the table.

Select Query For Bulk Insert

9.



Constraint violation on inserting a value other than pink/green