

## BODMAS EXPRESSION EVALUATOR

### Setting Up:

We can use STS and import the project and run it as a spring boot application.

### Source Code structure:

Using the ApplicationController as the main Rest controller available inside *beehyv.controller* package, we are making calling the methods from Service classes available in *beehyv.service* package. Model object from *beehyv.model* package is used to persist the Table **OperatorsCount** into H2 database.

This H2 DB can be accessed from : <http://localhost:8080/h2-console/login.jsp>

Username: sa and Password: "" (empty)

### REST End Points:

Using Spring Boot and H2 Data Base 2 REST endpoints are created here. On top of the overall REST controller I have the annotation `@RequestMapping("/bodmas")` which means we need to use it in the URL to make any endpoint call.

#### 1. `@PostMapping("evaluate/{userid}/**")`:

Here we can pass UserId (Integer) and the BODMAS expression that needs to be evaluated.

Sample Call from POSTMAN

**POST:** [http://localhost:8080/bodmas/evaluate/99/5\\*\(3+\(1-5\)\)/5](http://localhost:8080/bodmas/evaluate/99/5*(3+(1-5))/5)

**RESULT:** -1.0 (as expected)

Here UserId = 99 and Bodmas Expression to be processed is  $5*(3+(1-5))/5$

#### 2. `@GetMapping("/highestcount/{userid}")`

Sample Call from POSTMAN

**GET:** <http://localhost:8080/bodmas/highestcount/32>

**RESULT:** The most used operator for the User: 32 is \* Operator ----->8 times !!

(Result says \* operator (multiply) is used most frequently, based the above evaluate calls made for user Id 32)

Here UserId = 99