Write a Java program using JDBC that does the following. It prompts the user to enter a command followed by parameters. The commands could be one of the following, where stuff in <> indicates parameters:

1. selectall <relation>: This displays the entire contents of the specified relation, starting with the attribute names in the first line.
2. insert <relation> <value1> <value2> .. : This inserts the provided values into the specified relation.
3. select <relation> <value1> <value2> .. : The values are to be interpreted as primary key values, and the matching tuple (if any) is to be printed. Use JDBC metadata to find the primary key (with ordering of primary key attributes), and create appropriate selection conditions. The number of values provided should match the number of attributes in the primary key.
4. delete <relation> <value1> <value2> .. : The values are to be interpreted as primary key values, and the matching tuple is to be deleted. Reuse code from the previous option , without duplicating the code.

For ease of parsing the commands, you can assume that values are integers or strings without any spaces in them, and without any quotes.
Any error thrown by SQL should be printed out in all cases.

Note: You must make sure that you prevent SQL injection attacks. Prepared statements are part of the solution, but cannot be used for the relation name; figure out how to handle relation names safely.

Note: Make sure the top of the file has your roll number and name.