# P4 Testcases Report

#### test1.sql

-- The following code detects whether the program will reject insertion for a tuple with an attribute without value. In this case, the program should reject this insertion because there is no value for attribute dkey.

## test2.sql

-- The following code detects whether the program will accept string ". The program should accept the insertion and the query result should have 1 tuple.

### test3.sql

-- The following code test the correctness of Insertion, ScanSelect and IndexSelect, including correct projection, choice of selection method, and computation. For all the selection based on indexed attribute and op=EQ, the program should choose IndexSelect. For others, it should choose ScanSelect. The result should have projection tuple DB1.serial, DB1.ikey, DB1.filler with the same sequence.

### test4.sql

-- The following code test the correctness SNL, INL, and SMJ, including correct projection, choice of selection method, and computation for corner cases. If it is not a equality query, the program should use SNL. If it is an equality query and has an index on either the two attribute, it should use INL. If it is an equality query with no indices, it should use SMJ. The testcases include corner cases such as both relations are empty, only one is empty, and both have tuples. For the third one, we also consider corner cases such as duplicate tuples and duplicate attributes.

## test5.sql

-- The following code detects whether the program will detect error that no relation exist