CS4123 Autumn 2016
Homework Assignment 6
Continuing the example of the **Products**, **Testcases** and **Bugs** database from last week.

Q1 Write the following queries in **Relational Algebra**

   a) List the Pnum of each Bug, along with its severity. Include the Bnum in the result.
   b) What is the priority of each bug found by Acceptance testing? Include the Bnum in the result.
   c) Get the customer for the test case identified by T1098
   d) Get the customer and release date for each product being Unit tested.
   e) Get the Tnum, author and type of testing being done for a Product named SWIFT11X.
   f) Get the author and type of testing done for each bug with a priority of 1. What else should be in the result?

Q2 Re-write the above queries in **Relational Calculus**

Q3 Write the following queries in Relational Calculus:

   a) How many Testcases are there?
   b) How many Testcases have found a Bug?
   c) How many Products have Testcases been written for?
   d) How many Products have bugs?
   e) Name the customers whose products have Bugs
   f) List the severity and priority of each bug along with the product name, release number and release date.
   g) For each bug with a severity of 5, list the author of the testcase that found the bug.
   h) For each bug with a priority of at least 4, name the customer and the product.