COMP9311 22T3

Assignment two
Sample Outputs

Database Systems

Last updated: **Sunday 23rd October 10:23pm**
Most recent changes are shown in red ... older changes are shown in brown.

[Assignment Spec] [Database] [Schema Summary] [Testing] **[Samples]**

A sample session with the MyMyUNSW database into which have been loaded (hopefully correct) attempts at the Assignment 2 questions. Let me know ASAP if you think any of these are incorrect, although the *real* arbiter of correctness is whatever is in the expected_qX tables in check.sql

Note (before anyone asks the traditional question that is asked every year): the order of tuples in the results does not matter. Formatting *does* matter; extraneous spaces or incorrect upper/lower-case will cause your "solution" to be marked incorrect.

```
$ psql ass2
psql (13.8 (Debian 13.8-0+deb11u1))
Type "help" for help.

ass2=# \i ass2.sql
CREATE VIEW
... etc. etc. etc. ...
CREATE FUNCTION
ass2=# select * from q1_a order by starting;
          name           |                       school                        | starting
-------------------------+-----------------------------------------------------+------------
 Stephen Frenkel         | Organisation and Management                         | 1975-07-14
 Anthony Dooley          | Mathematics & Statistics                            | 1980-11-03
 David Lovell            | Humanities and Social Sciences (ADFA)               | 1983-12-16
 Christopher Rizos       | Surveying and Spatial Information Systems            | 1984-01-03
 Philip Mitchell         | Psychiatry                                          | 1985-01-07
 Roger Simnett           | Accounting                                          | 1987-02-02
 Nicholas Hawkins        | Medical Sciences                                    | 1989-01-09
 Brendan Edgeworth       | School of Law                                       | 1989-02-01
 Ross Harley             | Media Arts                                          | 1989-02-13
 Christopher Taylor      | Business Law and Taxation                           | 1989-07-17
 Sylvia Ross             | Art - COFA                                          | 1990-01-01
 David Cohen             | Biological, Earth and Environmental Sciences        | 1990-01-29
 Michael Frater          | Information Technology and Electrical Engineering (ADF | 1991-02-28
 Richard Newbury         | Physics                                             | 1991-03-01
 Kim Snepvangers         | Art History & Art Education (COFA)                  | 1993-02-02
 David Waite             | Civil and Environmental Engineering                 | 1993-07-05
 Paul Brown              | History and Philosophy                              | 1994-01-04
 Richard Corkish         | Photovoltaic and Renewable Engineering              | 1994-04-01
 Kevin Fox               | Economics                                           | 1994-07-01
 Michael Chapman         | Women's and Children's Health                       | 1994-10-10
 Bruce Hebblewhite       | Mining Engineering                                  | 1995-04-01
 Fiona Stapleton         | Optometry and Vision Science                        | 1995-09-25
 Rogelia Pe-Pua          | Social Sciences and International Studies            | 1996-02-12
 Paul Patterson          | Marketing                                           | 1996-09-02
 Liz Williamson          | Design Studies - COFA                               | 1997-01-02
 Barbara Messerle        | Chemistry                                           | 1999-03-01
 Anne Simmons            | Graduate School of Biomedical Engineering           | 1999-06-28
 Eliathamby Ambikairajah | Electrical Engineering & Telecommunications         | 1999-08-25
 Margaret McKerchar      | Australian School of Taxation (ATAX)                | 2000-01-28
 Andrew Killcross        | Psychology                                          | 2001-07-01
 Brian Lees              | Physical, Environmental and Mathematical Sciences (ADF | 2002-06-26
 Michael Hess            | Business (ADFA)                                     | 2004-05-21
 John Ballard            | Biotechnology and Biomolecular Sciences             | 2005-02-01
 Chandini MacIntyre      | Public Health & Community Medicine                  | 2008-03-26
 Maurice Pagnucco        | Computer Science and Engineering                    | 2010-07-01
(35 rows)

ass2=# select * from q1_b;
     status      |       name       |              school              |  starting
-----------------+------------------+----------------------------------+------------
 Longest serving | Stephen Frenkel  | Organisation and Management      | 1975-07-14
 Most recent     | Maurice Pagnucco | Computer Science and Engineering | 2010-07-01
```

```
 (2 rows)

ass2=# select * from q2;
 subject_code | use_rate
--------------+----------
 CHEM1011     |       14
 ECON1202     |       14
(2 rows)

ass2=# select * from q3;
 unsw_id |    student_name
---------+-----------------------
 2272011 | Dominic Barcz
 2277008 | Daniel De Hoop
 2248083 | Robert Torazzi
 3072343 | Dounia Zanich
 3011341 | Maria Satouris
 3082284 | Thomas Chiofalo
 3033560 | Hyeon Jinkyu
 3096847 | Boon Clements
...
...
(15 rows)

ass2=# \timing
Timing is on.
ass2=# select * from q4;
 course_id
-----------
     58391
(1 row)

Time: 385.885 ms

ass2=# select * from q5;
 term | nstudes |  fte
------+---------+--------
 00s1 |    5527 | 4990.3
 00s2 |    5790 | 5219.3
 01s1 |    6323 | 5454.3
 01s2 |    6350 | 5511.0
 02s1 |    6813 | 5816.4
 02s2 |    7105 | 5988.3
 03s1 |    7119 | 5994.9
 03s2 |    6836 | 5742.7
 04s1 |    6897 | 5734.5
 04s2 |    6581 | 5486.1
 05s1 |    6549 | 5305.0
 05s2 |    6174 | 4954.5
 06s1 |    6077 | 4905.4
 06s2 |    5872 | 4750.8
 07s1 |    5990 | 4847.4
 07s2 |    5854 | 4741.2
 08s1 |    6117 | 4980.9
 08s2 |    6030 | 4927.2
 09s1 |    6724 | 5512.6
 09s2 |    6829 | 5566.4
 10s1 |    7362 | 6128.7
 10s2 |    7279 | 6094.9
(22 rows)

Time: 1458.437 ms
ass2=# select * from q6 order by subject;
               subject                | nofferings
--------------------------------------+------------
 FINS5511 Corporate Finance           |         34
 GEND1204 Studies in Painting         |         32
 GEND4208 Working with Ceramics       |         32
 GEND4209 Working with Jewellery      |         32
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 GEND4210 Textiles and Fashion      |          31
 MDCN0001 Medicine:Short Course (SWSAHS) |      31
 MDCN0002 Medicine: Short Course (St G)  |      31
 MDCN0003 Medicine: Short Course (St V)  |      32
(8 rows)

Time: 2584.434 ms
ass2=# select * from q7('radio mic');
            room             |      facility
-----------------------------+------------------
 Matthews Theatre A          | Radio microphone
 Matthews Theatre B          | Radio microphone
 Matthews Theatre C          | Radio microphone
 Matthews Theatre D          | Radio microphone
 Physics Theatre             | Radio microphone
 Webster Theatre A           | Radio microphone
 Webster Theatre B           | Radio microphone
 Red Centre Theatre          | Radio microphone
 Rex Vowels Theatre          | Radio microphone
 Macauley Theatre            | Radio microphone
 Biomedical Lecture Theatre A | Radio microphone
 Biomedical Lecture Theatre B | Radio microphone
 Biomedical Lecture Theatre C | Radio microphone
 Biomedical Lecture Theatre D | Radio microphone
 Central Lecture Block Theatre 7 | Radio microphone
 Rupert Myers Theatre        | Radio microphone
 Murphy Theatre              | Radio microphone
 Smith Theatre               | Radio microphone
 Applied Science Theatre 1   | Radio microphone
 MAT-310                     | Radio microphone
 OMB-112                     | Radio microphone
 Sir John Clancy Auditorium  | Radio microphone
(22 rows)

Time: 2.098 ms
ass2=# select * from q7('Board');
            room             |   facility
-----------------------------+------------
 Matthews Theatre A          | Blackboard
 Matthews Theatre B          | Blackboard
 Matthews Theatre C          | Blackboard
 Matthews Theatre D          | Blackboard
 QUAD-1042                   | Blackboard
 Electrical Engineering G24  | Blackboard
 Electrical Engineering G25  | Blackboard
 Physics Theatre             | Blackboard
 Webster Theatre A           | Blackboard
 Webster Theatre B           | Blackboard
 Nyholm Theatre              | Blackboard
 Red Centre Theatre          | Blackboard
 Rex Vowels Theatre          | Blackboard
 Macauley Theatre            | Blackboard
 Biomedical Lecture Theatre A | Blackboard
 Biomedical Lecture Theatre B | Blackboard
 Biomedical Lecture Theatre C | Blackboard
 Biomedical Lecture Theatre D | Blackboard
 Biomedical Lecture Theatre E | Blackboard
 Biomedical Lecture Theatre F | Blackboard
 Central Lecture Block Theatre 2 | Blackboard
 Central Lecture Block Theatre 3 | Blackboard
 Central Lecture Block Theatre 4 | Blackboard
 Central Lecture Block Theatre 6 | Blackboard
 Central Lecture Block Theatre 7 | Blackboard
 Central Lecture Block Theatre 8 | Blackboard
 Dwyer Theatre               | Blackboard
 Mellor Theatre              | Blackboard
 Murphy Theatre              | Blackboard
 Smith Theatre               | Blackboard
 Applied Science Theatre 1   | Blackboard
```

```
      QUAD-1049                     | Blackboard
      QUAD-G040                     | Blackboard
      QUAD-G048                     | Blackboard
      QUAD-G055                     | Blackboard
      AS-301                        | Blackboard
      AS-G05                        | Blackboard
      B11A-101                      | Blackboard
      B9-160                        | Blackboard
      B9-170                        | Blackboard
      CE-102                        | Blackboard
      CE-713                        | Blackboard
      CE-G6                         | Blackboard
      CE-G8                         | Blackboard
      CHEM-611                      | Blackboard
      CHEM-613                      | Blackboard
      CHEM-614                      | Blackboard
      EE-218                        | Blackboard
      EE-219                        | Blackboard
      EE-220                        | Blackboard
      EE-221                        | Blackboard
      EE-222                        | Blackboard
      EE-418                        | Blackboard
      JG-LG21                       | Blackboard
      MAT-102                       | Blackboard
      MAT-1021                      | Blackboard
      MAT-1024                      | Blackboard
      MAT-104                       | Blackboard
      MAT-1216                      | Blackboard
      MAT-1226                      | Blackboard
      MAT-123                       | Blackboard
      MAT-130                       | Blackboard
      MAT-301                       | Blackboard
      MAT-302                       | Blackboard
      MAT-303                       | Blackboard
      MAT-306                       | Blackboard
      MAT-307                       | Blackboard
      MAT-308                       | Blackboard
      MAT-309                       | Blackboard
      MAT-310                       | Blackboard
      MAT-311                       | Blackboard
      MAT-312                       | Blackboard
      MAT-313                       | Blackboard
      MAT-921                       | Blackboard
      MAT-924                       | Blackboard
      MAT-929                       | Blackboard
      MB-307                        | Blackboard
      MB-308B                       | Blackboard
      MB-G3                         | Blackboard
      MB-G4                         | Blackboard
      MB-G5                         | Blackboard
      MB-G7                         | Blackboard
      MB-LG30                       | Blackboard
      OMB-112                       | Blackboard
      OMB-113                       | Blackboard
      OMB-114                       | Blackboard
      OMB-115                       | Blackboard
      OMB-116                       | Blackboard
      OMB-117                       | Blackboard
      OMB-145A                      | Blackboard
      OMB-149A                      | Blackboard
      OMB-150                       | Blackboard
      OMB-232                       | Blackboard
      QUAD-1045                     | Blackboard
      QUAD-1046                     | Blackboard
      QUAD-1047                     | Blackboard
      QUAD-1048                     | Blackboard
      QUAD-G022                     | Blackboard
      QUAD-G025                     | Blackboard
      QUAD-G026                     | Blackboard
```

```
 QUAD-G027                       | Blackboard
 QUAD-G031                       | Blackboard
 QUAD-G032                       | Blackboard
 QUAD-G034                       | Blackboard
 QUAD-G035                       | Blackboard
 QUAD-G041                       | Blackboard
 QUAD-G042                       | Blackboard
 QUAD-G044                       | Blackboard
 QUAD-G045                       | Blackboard
 QUAD-G046                       | Blackboard
 QUAD-G047                       | Blackboard
 QUAD-G052                       | Blackboard
 QUAD-G053                       | Blackboard
 QUAD-G054                       | Blackboard
 RC-1040                         | Blackboard
 RC-1041                         | Blackboard
 RC-1042                         | Blackboard
 RC-1043                         | Blackboard
 RC-2060                         | Blackboard
 RC-2061                         | Blackboard
 RC-2062                         | Blackboard
 RC-2063                         | Blackboard
 RC-M032                         | Blackboard
 ME-303                          | Blackboard
 ME-304                          | Blackboard
 Central Lecture Block Theatre 1 | Blackboard
 Central Lecture Block Theatre 5 | Blackboard
 Keith Burrows Theatre           | Blackboard
 WEBSTER-236                     | Blackboard
(129 rows)

Time: 2.400 ms
ass2=# select * from q7('whiteboard');
 room | facility
------+----------
(0 rows)

Time: 1.555 ms
ass2=# select q8('2005-01-01');
  q8
------
 05x1
(1 row)

Time: 2.548 ms
ass2=# select q8('2005-04-01');
  q8
------
 05s1
(1 row)

Time: 0.865 ms
ass2=# select q8('2009-02-21');
  q8
------
 09x1
(1 row)

Time: 0.645 ms
ass2=# select q8('2009-02-22');
  q8
------
 09s1
(1 row)

Time: 0.581 ms
ass2=# select * from q9(3169329);
   code   | term |              name               | mark | grade | uoc
----------+------+---------------------------------+------+-------+-----
```

```
  COMP1711 | 05s1 | Higher Computing 1A            | 76 | DN |  6
  MATH1081 | 05s1 | Discrete Mathematics          | 57 | PS |  6
  MATH1131 | 05s1 | Mathematics 1A                | 59 | PS |  6
  PHYS1121 | 05s1 | Physics 1A                    | 56 | PS |  6
  COMP1721 | 05s2 | Higher Computing 1B           | 76 | DN |  6
  ELEC1011 | 05s2 | Electrical Engineering 1      | 62 | PS |  6
  MATH1231 | 05s2 | Mathematics 1B                | 61 | PS |  6
  PHYS1601 | 05s2 | Comp. Applic'ns in Exp. Sci. 1| 94 | HD |  6
  GENL0230 | 06x1 | Law in the Information Age     | 78 | DN |  3
  COMP2121 | 06s1 | Microprocessors & Interfacing  | 50 | PS |  6
  COMP2711 | 06s1 | Higher Data Organisation       | 63 | PS |  6
  COMP2920 | 06s1 | Professional Issues and Ethics | 73 | CR |  3
  MATH2301 | 06s1 | Mathematical Computing         | 48 | PC |  6
  COMP2041 | 06s2 | Software Construction          | 82 | DN |  6
  COMP3421 | 06s2 | Computer Graphics             | 68 | CR |  6
  GENS4015 | 06s2 | Brave New World               | 63 | PS |  3
  INFS1602 | 06s2 | Info Systems in Business      | 62 | PS |  6
  PHYS2630 | 06s2 | Electronics                   | 63 | PS |  3
  COMP3111 | 07s1 | Software Engineering          | 67 | CR |  6
  COMP3331 | 07s1 | Computer Networks&Applications | 66 | CR |  6
  COMP3411 | 07s1 | Artificial Intelligence       | 60 | PS |  6
  GENL2020 | 07s1 | Intro to Australian Legal Sys | 69 | CR |  3
  COMP3121 | 07s2 | Algorithms & Programming Tech | 54 | PS |  6
  COMP3222 | 07s2 | Digital Circuits and Systems  | 65 | CR |  6
  MATH3411 | 07s2 | Information, Codes and Ciphers | 50 | PS |  6
  GENS4001 | 08x1 | Astronomy                     | 84 | DN |  3
  COMP3311 |      | Advanced standing, based on ... |   |    |  6
           |      | study at The University of Sydney |  |    |
           |      | Overall WAM                   | 64 |    | 144
 (29 rows)

Time: 9.440 ms
ass2=# select * from q9(3270322);

   code   | term |              name              | mark | grade | uoc
----------+------+--------------------------------+------+-------+-----
  COMP1911 | 07s1 | Computing 1A                  | 79 | DN |  6
  ENGG1000 | 07s1 | Engineering Design            | 63 | PS |  6
  INFS1603 | 07s1 | Business Databases            | 81 | DN |  6
  MATH1131 | 07s1 | Mathematics 1A                | 63 | PS |  6
  COMP1921 | 07s2 | Computing 1B                  | 63 | PS |  6
  INFS1602 | 07s2 | Info Systems in Business      | 59 | PS |  6
  MATH1081 | 07s2 | Discrete Mathematics          | 59 | PS |  6
  MATH1231 | 07s2 | Mathematics 1B                | 73 | CR |  6
  GENM0703 | 08x1 | Concept of Phys Fitness&Health | 63 | PS |  3
  GENS8004 | 08x1 | Ergonomics, Product & Safety  | 77 | DN |  3
  ACCT1501 | 08s1 | Accounting & Financial Mgt 1A | 61 | PS |  6
  COMP2911 | 08s1 | Eng. Design in Computing      | 67 | CR |  6
  COMP2920 | 08s1 | Professional Issues and Ethics | 83 | DN |  3
  COMP2041 | 08s2 | Software Construction         | 76 | DN |  6
  COMP2121 | 08s2 | Microprocessors & Interfacing | 63 | PS |  6
  COMP9315 | 08s2 | Database Systems Implementat'n | 52 | PS |  6
  ARTS1450 | 09s1 | Introductory Chinese A        | 68 | CR |  6
  COMP3141 | 09s1 | Software Sys Des&Implementat'n | 73 | CR |  6
  COMP9318 | 09s1 | Data Warehousing & Data Mining | 63 | PS |  6
  COMP9321 | 09s1 | Web Applications Engineering  | 75 | DN |  6
  COMP3421 | 09s2 | Computer Graphics             | 67 | CR |  6
  COMP3711 | 09s2 | Software Project Management   | 75 | DN |  6
  COMP9322 | 09s2 | Service-Oriented Architectures | 71 | CR |  6
  COMP9323 | 09s2 | e-Enterprise Project          | 85 | HD |  6
  GENC7003 | 09s2 | Managing Your Business        | 73 | CR |  3
  COMP3311 |      | Exemption, based on ...       |    |    |
           |      | study at The University of Sydney |  |    |
           |      | Overall WAM                   | 68 |    | 138
 (28 rows)

Time: 8.822 ms
ass2=# ... etc. etc. etc. ...
```