

SIT103 Database

Lab Exercise 2 - SQL

Tutorial Exercises

Using the STUDENT tables, write queries to produce the following reports.

- A. Give full details of student 8701872G.

Select * from student where details = 8701872G;

- B. List students enrolled in programme 165000, in surname order,
listing: Student Number, Full name, Sex and date of birth.

Select student_no, SURNAME || ', ' || GIVEN AS "Full Name", sex, dob as "birth" from student where PROGRAMME_CODE = 165000 order by surname;

- C. List students that were born before 1965?

Select * from student where dob < 1965;

- D. Show course code and course name of all courses whose code starts with AC?

Select COURSE_CODE, COURSE_NAME from COURSE where COURSE_CODE like 'AC%';

- E. Print all programme codes and programme names for department 165.

Select PROGRAMME_CODE, PROGRAMME_NAME from PROGRAMME where DEPT_NO = 165;

- F. List all part time students, sorted by Surname then sorted by Given name
listing: Student Number, Programme code, Student Name and Phone number.

Select STUDENT_NO, PROGRAMME_CODE, SURNAME || ', ' || GIVEN AS "Full Name", PHONE from student order by Surname, given;

- G. List the Names, Addresses and Phone numbers of all males living in Carlton (postcode 3053).

Select surname || ', ' || given as "name", ADDR1 || ', ' || ADDR2 || ', ' || ADDR3 AS "address", phone from student where POSTCODE = 3053 and SEX = M;

- H. Show the course names of all courses in department 165, sorting the course name in descending order.

Select COURSE_NAME from course where DEPT_NO = 165 order by COURSE_NAME DESC;

- I. List all male part-time students, showing students full name and student number only, in youngest to oldest order (based on date of birth).

Select surname || ', ' || given as "full name", STUDENT_NO from student where sex = M and PROGRAMME_LOAD = P order by DOB DESC;

- J. List all the student numbers of students enrolled (student_course) in the course AD513 and starting in semester 1.

Select STUDENT_NO from STUDENT_COURSE where COURSE_CODE = AD513 and sem_start = 1;

TABLE DEFINITIONS

STUDENT TABLE

Name	Type
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STUDENT_NO	CHAR (8)
SURNAME	VARCHAR2 (30)
GIVEN	VARCHAR2 (30)
DOB	DATE
SEX	CHAR (1)
ADDR1	VARCHAR2 (40)
ADDR2	VARCHAR2 (40)
ADDR3	VARCHAR2 (40)
POSTCODE	NUMBER (4)
PHONE	VARCHAR2 (20)
PROGRAMME_CODE	VARCHAR2 (6)
PROGRAMME_LOAD	VARCHAR2 (1)

PROGRAMME TABLE

Name	Type
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PROGRAMME_CODE	VARCHAR2 (6)
PROGRAMME_NAME	VARCHAR2 (50)
DEPT_NO	NUMBER (38)

COURSE TABLE

Name	Type
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COURSE_CODE	CHAR (5)
COURSE_NAME	VARCHAR2 (60)
DEPT_NO	NUMBER (38)

STUDENT_COURSE TABLE

Name	Type
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STUDENT_NO	CHAR (8)
COURSE_CODE	CHAR (5)
COURSE_PROGRAMME	VARCHAR2 (6)
SEM_START	NUMBER (1)
SEM_DURATION	NUMBER (1)
RESULT	VARCHAR2 (4)