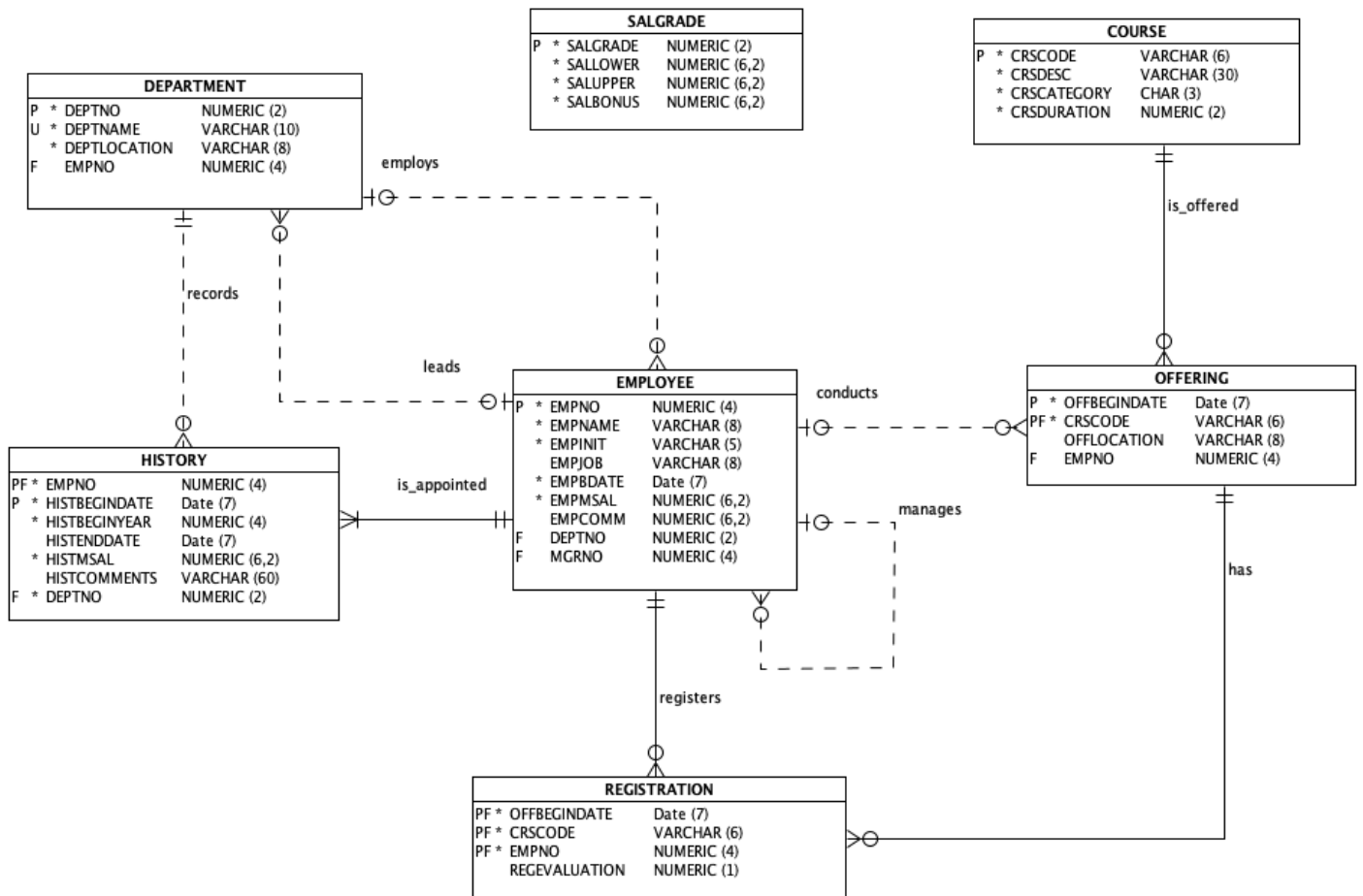


## SQL Revision

These queries should be carried out against the PAYROLL tables on the Monash database.

The data model for this set of tables is:



## PART A

1. Display the full details of employees who earn less than \$1000, order the output by the employee number.
2. List the department number of departments that have employees, order the output by the department number .
3. Display the full details of trainers (employee job is TRAINER) who earn less than 2500 each month and are working in department 20. Order the output by employee number.
4. Display the name, job, monthly salary and commission of employees whose monthly salary is higher than their commission. Rename the columns: Name, Job, Monthly Salary and Commission. Order the output by name and within name by descending monthly salary.
5. Display the name and job of employees whose job ends with the letter R. Order the output by name and within name by job.
6. Display the name and job of employees that have a name starting with "J", "K" or "M". Order the output by name and within name by job.
7. Display the name, job, date of birth and monthly salary of employees who were born before 1990 and earn more than 1500 each month. Order the output by name and within name by monthly salary.
8. Display the name, job, date of birth and salary of employees that don't have a commission. Order the output by name, and within name by date of birth.
9. Display the employee name, job, department name, location and monthly salary of employees that work in NEW YORK. Order the output by name, and within name by job.
10. Display the name and job of employees who do not work in NEW YORK or CHICAGO. Order the output by name, and within name by job.
11. Display the name, job, date of birth and salary of employees who were born in the first half of the 70s. Display the output in birth date order and within birthdate by name.
12. Display the name, job and salary of employees who earn less than 1500 or greater than 3000 per month. Order the output by name, and within name by monthly salary.
13. Display the name, job and manager number of employees who have a manager. Order the output by manager number and within a given manager by employee name.
14. Display the name, job, department name, department location and monthly salary of employees who either work in DALLAS or as a MANAGER, and earn more than 2500. Order the output by name and within name by monthly salary.
15. Display the name, job, monthly salary and salary grade of all employees. Display the list in monthly salary order within salary grade order.
16. Display the name and location of ALL departments, and the name of their employees. Display the output in employee name order within department name order.
17. Display the name of ALL employees, their job and the name of their manager. List the output in employee name order within manager name order.

18. For each employee display their employment history. In the listing include the employees' name, the name of the department they worked for, the begin and end date and their monthly salary. Display the output in begin date order (most recent at the top of the list) within employee name order.

19. Display the employee name, empjob, monthly salary and annual salary of all employees (annual salary is monthly salary x 12). Order the output by annual salary with the highest value shown first and within annual salary by name.

20. Display the employee name, empjob, monthly salary, empcommission and annual income (salary and empcommission) of all employees. Commission is paid on a monthly basis. Order the output by name, and within by annual income.

## PART B

1. Display for all employees their number, name, job, monthly salary, their current annual salary (not including commission) and what their annual salary would be if they were given a 10% pay rise. Order the output by employee number.
2. Display the name of all employees, their birthdate and their age in years. Order the output by birthdate, within birthdate order the output by name.
3. Display for all employees, their number, name, job, monthly salary, commission (which is paid monthly) and their current annual salary (including commission). Order the output by employee number.
4. Display all employees' details in the following format: EMPLOYEE N. Smith IS A Trainer AND WORKS IN THE Training DEPARTMENT. Order the output by employee number.
5. Display the name of all employees, their birthdate and their age in months. Order the output by age in months (with the oldest employee first), within age in months order the output by name. The age in months must be shown with one decimal point and right aligned.
6. Display the employees who were born in February. Order the output by employee name.
7. Display the employee name, salary and commission (using the GREATEST function) for those employees who earn more commission than their monthly salary. Order the output by employee name and within name by monthly take home pay (salary plus commission).
8. Display the name of all employees and their birthdate in the following format: EMPLOYEE N. Smith was born on FRIDAY the 17 of DECEMBER , 1982. Order the output by employee name.
9. Display the name of the employees who have registered for a course and the number of times they have registered. Order the output by employee number.
10. Who is the oldest employee? Show the employee number, name and date of birth. Order the output by employee number.
11. For each department, list the department number and name, the number of employees, the minimum and maximum monthly salary, the total monthly salary and the average salary paid to their employees. Name the columns: NbrOfEmployees, MinSalary, MaxSalary, TotalSalary, AvgSalary. Order the output by department number.
12. Display the department number, jobs available in that department and the total monthly salary paid for each job. Order the output by department number and within a department by job.
13. Which employee earns more than the average salary? Show the employee number, name and monthly salary. Order the output by employee number.
14. Which department has the greatest average monthly salary? Show the department no, name and average monthly salary. Order the output by department number.
15. Which course has the most offerings? Show the course code, description and number of offerings. Order the output by the number of offerings in descending order and within the number of offerings by the course code.
16. Display the name, job and date of birth of employees who perform the same job as SCOTT and were born in the same year. Do not include SCOTT in the output. Order the output by employee name.

17. Using the MINUS statement, which employees have never registered in a course. Show their employee number and name. Order the output by employee number.

18. Using the INTERSECT statement, which employees have both registered for and conducted courses. Show the employee number and name. Order the output by employee number.