Introduction	to Ouer	vin	c
IIIII Ouuction	to Quei	y I I I	F

Group members:			

Consider the scenario of employees working in departments, and the following database:

## **EMPLOYEES**

id	ename	salary	deptnum
111	Sandra Smith	50111	1
222	Bill Williams	50222	2
333	John Smith	63333	3
444	Alice Allison	64444	3
555	Richard English	45555	1
666	Jane Johnson	46666	4
777	Casey Jones	77777	1
888	Derek Ortiz	88888	4

## **DEPARTMENTS**

deptnum	deptname
1	Human Resources
2	Research
3	Administration
4	Payroll

1. Draw the design, which is called a schema, of this database, indicating primary and foreign keys.

- 2. Answer the following queries in both Access QBE and SQL statements, identifying the operations used in answering the query (horizontal filtering, vertical filtering, join, union, negation, intersection). Note that the first step in answering a query is analyzing the design to see what tables are needed to answer the query.
  - a) Which employees earn more than \$50,000?
  - b) What is John Smith's salary?
  - c) What is the department number for Research?
  - d) What are the names of employees who work in Human Resources?
  - e) What is the name of the department in which John Smith works?