Using the COMPANY database (as illustrated in Figure 5.6 of the Elmasri/Navathe textbook), devise solutions, in Relational Algebra, to the following informally-stated queries:

1. Retrieve the first and last names of any employee who is male and has a salary greater than $45,000.

2. Retrieve the name and birthdate of anyone who is either a female dependent of an employee who works for Department 3 or a dependent (of either sex) of an employee who works for Department 4.

3. Retrieve the last name of any employee who works for a different department than does her/his direct supervisor.

4. Retrieve the last name and birthdate of any employee who is no one’s direct supervisor.

5. Retrieve the last name and birthdate of any employee who works on a project that is controlled by a department different from the one for which the employee works.