Adapted from Exercise 8.11 Ramakrishnan & Gehrke: Consider the following relations:

```
Emp(eid integer, ename varchar, sal integer, age integer, did integer)
Dept(did integer, budget integer, floor integer, mgr_eid integer)
```

Salaries range from $10,000 to $100,000, ages vary from 20 to 80, each department has about five employees on average, there are 10 floors, and budgets vary from $10,000 to $1 million. You may assume the following.

- The column values are uniformly distributed.

- The `Emp` table has 10,000 rows stored in 100 pages.

- The `Dept` table has 2,000 rows stored in 30 pages.

- Nested loop joins (NLJ) and index nested loop joins (INLJ) are supported.

- A hash index on Dept.floor has been created

- A B+ tree index on (Emp.age,Emp.salary) has been created with about 50 leaf pages and a fanout of 10.

- A B+ tree index on Dept.did has been created with about 15 leaf pages and a fanout of 10.

Pick at least 2 different query execution plans (QEPs) for the following query and estimate the cost of the QEP in terms of the number of disk IOs.

```
SELECT E.eid
FROM Emp E, Dept D
WHERE E.did=D.did AND D.floor=10 AND E.age<30 AND E.salary>70000
```