

location(country, cnumber) airport(city, ano, cnumber, year) works(worker, ano)

1. (2.5) For the sample database instance, give the output of the following query:

```
SELECT worker, city, country      FROM location, airport, works
WHERE location.cnumber=airport.cnumber AND
location.cnumber=100 AND worker='James';
```

2. (2.5) For the sample database instance, give the output of the following query:

```
SELECT distinct worker FROM works WHERE ano IN
      (SELECT ano FROM airport WHERE year = 1965);
```

3. (2.5) For the sample database instance, give the output of the following query:

```
SELECT DISTINCT W1.worker
FROM works W1, works W2
WHERE W1.ano > W2.ano AND W1.worker=W2.worker;
```

4. (2.5) The query lists

```
SELECT DISTINCT W1.worker
FROM works W1
WHERE W1.worker IN
      (SELECT W2.worker FROM works W2 WHERE W1.ano > W2.ano);
```

- (a) workers who work in more than one airport.
- (b) workers who work in the highest numbered airport.
- (c) workers who work in the lowest numbered airport.
- (d) all workers