

Quiz 6

The three tables below are a representation of a database for a health clinic. The last table, 'Appointment', contains foreign keys referencing the Physician and Patient tables. Examine the tables and answer the questions below.

Physician

| ID* | First | Last | Specialty |
|-----|--------|--------|---------------|
| 1 | Ann | Arnold | general |
| 2 | Bob | Banner | cardiology |
| 3 | Carl | Chan | allergy |
| 4 | Denise | Duran | general |
| 5 | Elle | Encino | endocrinology |
| | | | |

Patient

| ID* | First | Last | Birthdate | Phone |
|-----|--------|---------|------------|--------------|
| 1 | Felipe | Fordham | 1982-06-28 | 718 555 1234 |
| 2 | Giada | Gordita | 1954-10-27 | 212 555 1235 |
| 3 | Harry | Howser | 1983-07-30 | 614 555 1236 |
| 4 | Inigo | Innis | 1994-09-02 | 201 555 1237 |
| 5 | Jana | Janoski | 1953-08-25 | 212 555 1238 |
| 6 | Katie | Kolata | 1975-02-18 | 718 555 1239 |
| | | | | |

Appointment – first two columns are foreign keys

| PatientID↑ (ref. Patient) | PhysicianID↑ (ref. Physician) | Date | Time |
|------------------------------|----------------------------------|------------|-------|
| 1 | 3 | 2015-12-15 | 10:30 |
| 1 | 4 | 2015-12-18 | 15:30 |
| 2 | 2 | 2015-12-11 | 11:15 |
| 3 | 5 | 2015-12-15 | 14:00 |
| 4 | 1 | 2015-12-16 | 10:00 |
| 4 | 2 | 2015-12-15 | 10:00 |
| 5 | 5 | 2015-12-15 | 10:30 |
| 6 | 4 | 2015-12-18 | 15:30 |
| | | | |

- Who is the youngest patient in the database? _____
- Name all the physicians that Inigo Innis is seeing? _____
- On what date(s) and time(s) does Katie Kolata have an appointment?

- Name any physicians or patients that have scheduling conflicts (two appointments for the same person at the same time). _____
- A new patient, Liam Lin (born June 11th, 1994), just made an appointment with Dr. Carl Chan on May 7th at 4:15 PM. Add that information to the appropriate tables above.

Below is a game tree in which player X is deciding which move to make: a, b, or c. The scores across the bottom are the relative value of that game state for player X. Use the *minimax* algorithm to propagate the scores and **determine the best move** for player X.

