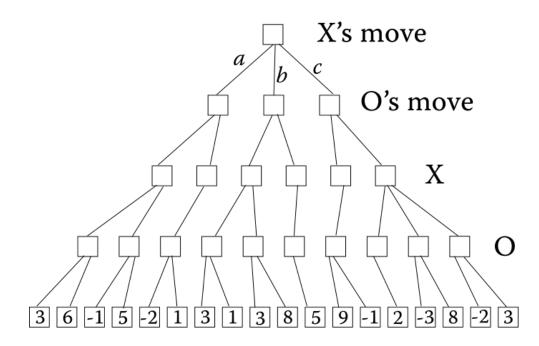
## Quiz 5

Wed Apr 19

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.



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     |            | Spe        | Specialty     |              |    |
|  | 1     |       | Arthur  |                  | Asmun    |            | gene       | general       |              |    |
|  | 2     |       | Bernice |                  | Brun     |            | card       | cardiology    |              |    |
|  | 3     |       | Caitlin |                  | Corvall  |            | aller      | allergy       |              |    |
|  | 4     |       | Doug    |                  | Drummond |            | gene       | general       |              |    |
|  | 5     |       | Edward  |                  | Ebaugh   |            | end        | endocrinology |              |    |
|  |       |       |         |                  |          |            |            |               |              |    |
| Patient  |       |       |         |                  |          |            |            |               |              |    |
| ID   | ID*   |       | First   |                  | Last     |            | Birthdate  |               | Phone        |    |
| 1  |       | Fel   | ipe     | Ford             | lham     | 1979-      | 06-28      | 718 5         | 55 12        | 34 |
| 2  | 2     |       | Giada   |                  | Gordita  |            | 1997-10-27 |               | 212 555 1235 |    |
| 3  | 3 H   |       | rry     | Howser           |          | 1994-07-30 |            | 614 555 1236  |              | 36 |
| 4  | l Ini |       | go      | Innis            |          | 1973-09-02 |            | 201 555 1237  |              | 37 |
| 5  | Jan   |       | ia      | Janoski          |          | 1984-08-25 |            | 212 555 1238  |              |    |
| 6  |       | Katie |         | Kolata           |          | 1978-02-18 |            | 718 555 1239  |              | 39 |
|  |       |       |         |                  |          |            |            |               |              |    |
| Appointment – first two columns are foreign keys |       |       |         |                  |          |            |            |               |              |    |
| PatientID↑                                       |       |       | Phy     | vsician          | lD↑      | Date       | Date       |               | ne           |    |
| (ref. Patient)                                   |       |       | (ref    | (ref. Physician) |          |            |            |               |              |    |
| 1  | 1     |       |         | 3                | 3        |            | 2017-05-15 |               | 10:3         | 30 |
|  |       |       |         |                  |          |            |            |               |              |    |

| 1 | 3 | 2017-05-15 | 10:30 |
|---|---|------------|-------|
| 1 | 4 | 2017-05-18 | 15:30 |
| 2 | 2 | 2017-05-11 | 11:15 |
| 3 | 5 | 2017-05-15 | 14:00 |
| 4 | 1 | 2017-05-16 | 10:00 |
| 4 | 2 | 2017-05-15 | 10:00 |
| 5 | 5 | 2017-05-15 | 10:30 |
| 6 | 4 | 2017-05-18 | 15:30 |
|   |   |            |       |

- 1. Who is the youngest patient in the database? \_\_\_\_\_
- 2. Name all the physicians that Jana Janoski is seeing?
- 3. On what date(s) and time(s) does Felipe Fordham have an appointment?
- 4. Name any physicians or patients that have scheduling conflicts (two appointments for the same person at the same time). \_\_\_\_\_
- 5. A new patient, Liam Lin (born June 11th, 1994), just made an appointment with Dr. Doug Drummond on May 7th at 4:15 PM. Add that information to the appropriate tables above.