1. *patients with insomnia who haven’t visited a doctor this year*

(

(

**Diagnosing**

**\***

**Diagnosis**(name=”Insomnia”)<id→diagnosis>

)[patient\_id]

**\**

**Examination**(examination\_date>='2020-01-01')[patient\_id]

)

**\***

**Patient**[patient\_id, patient\_name]

1. *names of doctors who at least once examined in the room 323*

(

**Examination** (examination\_room=323)

[doctor=employee\_id]

**Employee**

)[employee\_name]

1. *doctors who diagnosed all diagnoses of group D*

**Diagnosing**[doctor, diagnosis]

**÷**

**Diagnosis**(group=”D”)<id→diagnosis>[diagnosis]

1. currently available rooms in which patient with id 100 has never stayed

(

(

**Patient**[patient\_id](patient\_id=100)

**x**

**Room**[block, number](available=True)

)

**\**

**Stay**[patient\_id, block, number]

)[block, number]

1. list of doctors and departments they head

**Doctor**<employee\_id→id>[id]

**\*L**

**Department**<name→department, head→id>[id, department]