

## 1 Seat assignment

The city council is holding a gala, but some of the guests have special needs, so both reception and seating need to be extra-careful.

With three available tables (one with 5 seats and two with 6 seats), the city council is looking to avoid interest conflicts by following some constraints:

- The Pharaoh's family (Dad, mom and two children) can't be near the Priest. The family kids are intrigued by the Robot, so they want to be on the same table.
- Demis, Vangelis and Mikis (the Greek) need to be on the same table.
- Wilson and Akerfeldt want to be seated with the Greek, but don't want to be in the same table than Parsons.
- Parsons and Gilmour prefer to be with one another.
- Dickinson, Harris, Dio and Summers—the metal-heads—are easy-going, so they don't have any restriction whatsoever. They just want beer.
- The Priest prefers to be far from the metal-heads and the Robot.

Write a program in Prolog to find any valid seating distribution. For this problem it is suggested that you use variables. **Hint:** Include an additional restriction that considers the sum of all values that variables can take. How many seats are there available for Table 1? Take advantage of the numeric nature of the problem.

**You are not requested to find a valid seating distribution by hand and, even if you do it, it will not be considered for grading.**