Adaptive Cardinality Estimation

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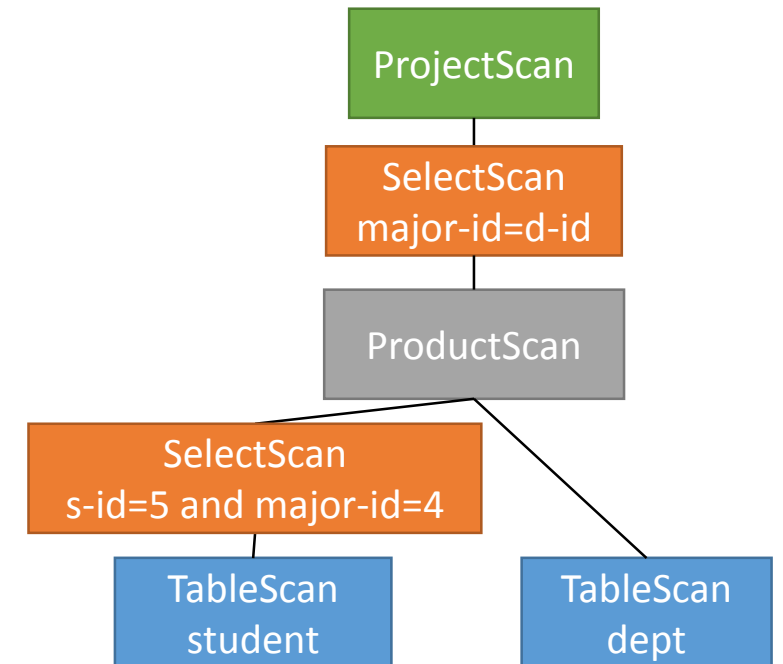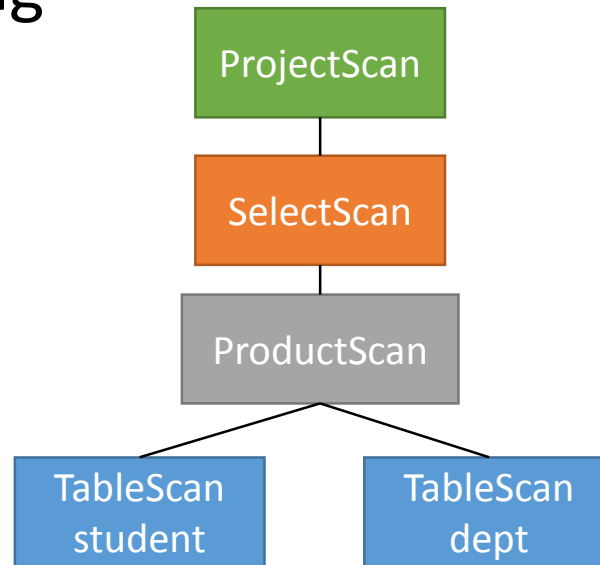
Outline

- What is the problem?
- Cardinality estimation process
- Formulate the ML problem

What is the problem?

- Query optimization
- Cadinality of a node
- Dynamic programmimg

```
SELECT sname FROM student, dept
WHERE  major-id = d-id AND s-id = 5 AND
major-id = 4;
```
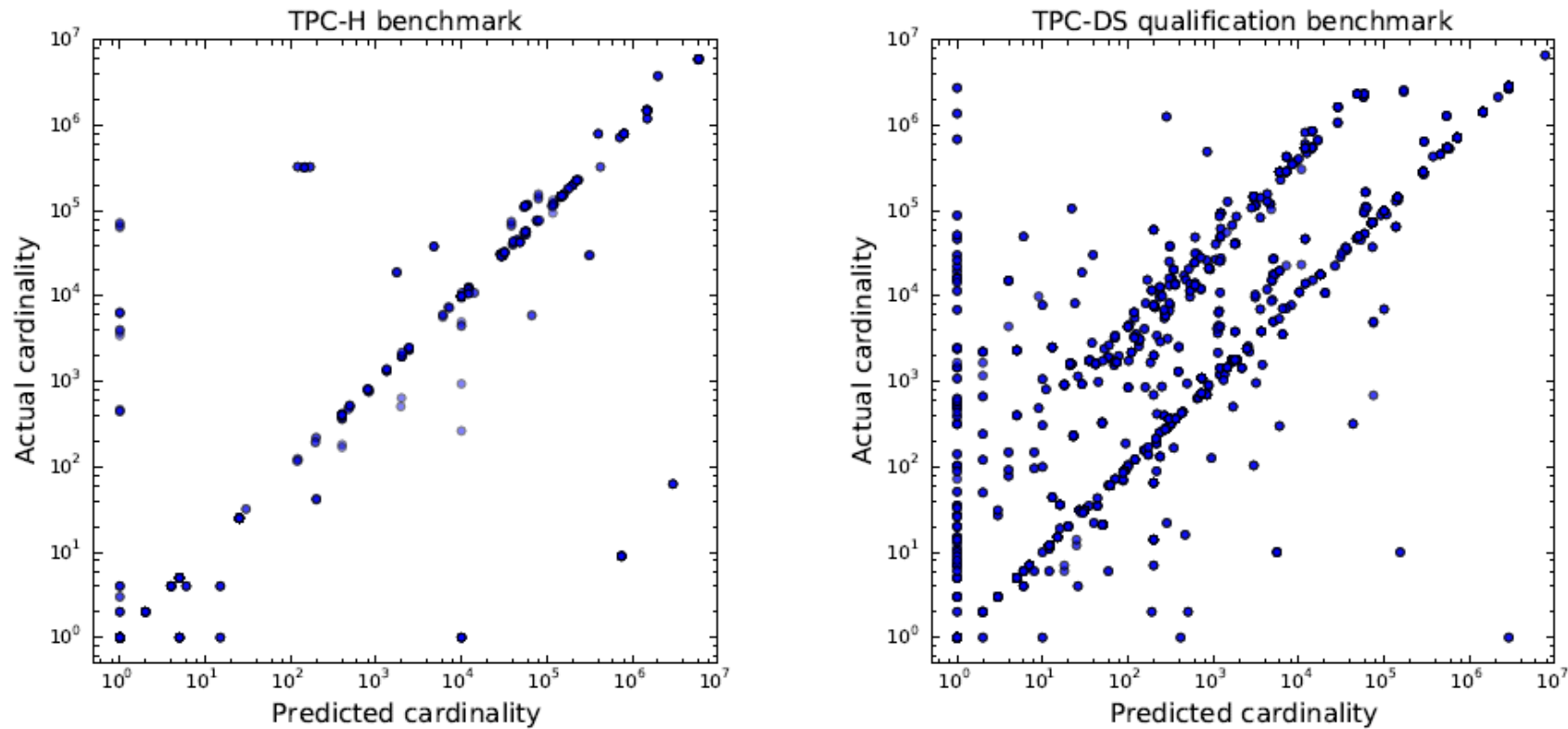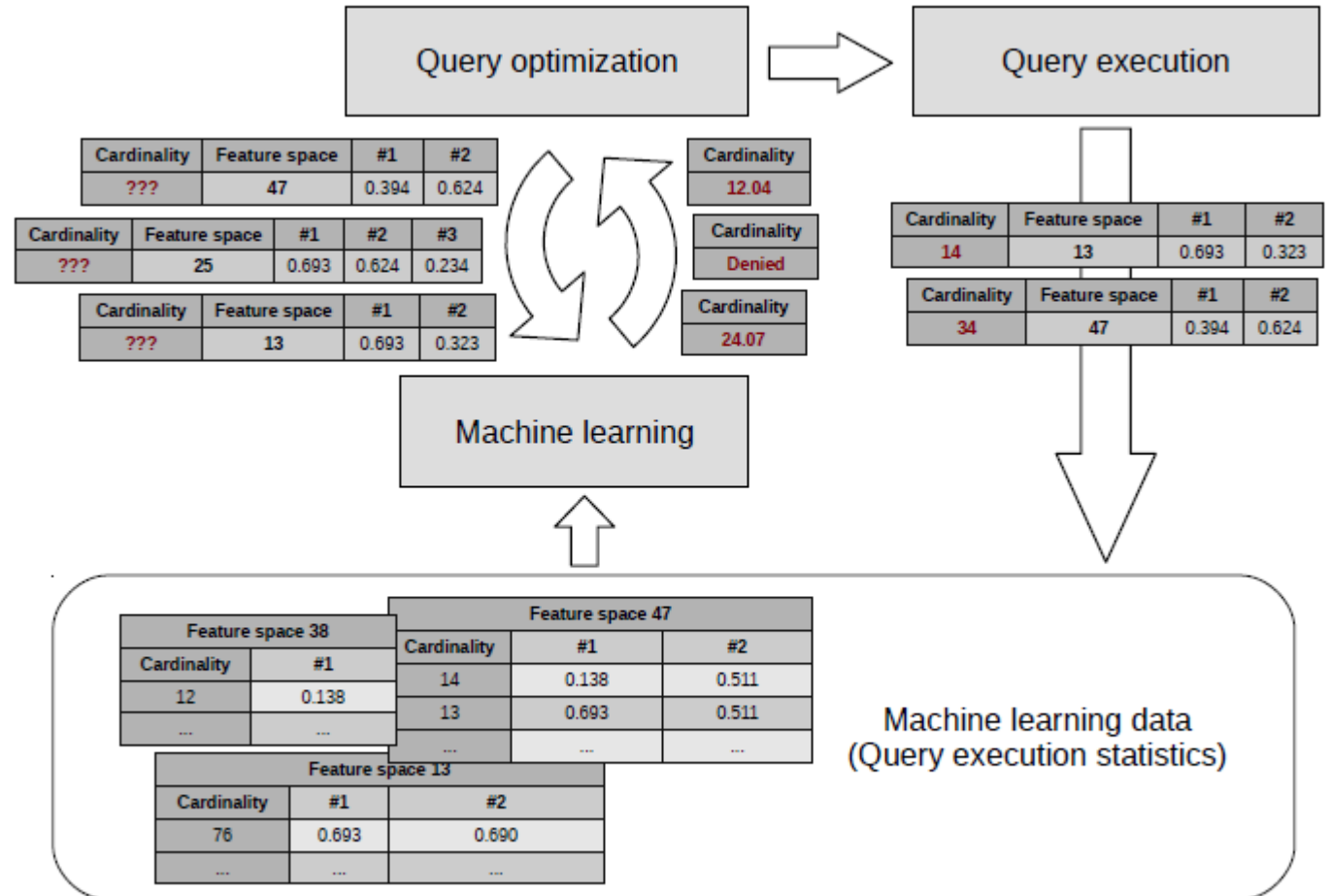
Cardinality estimation

Figure 10: Quality of cardinality prediction using standard PostgreSQL estimator

Process of the adaptive cardinality estimation

- Output
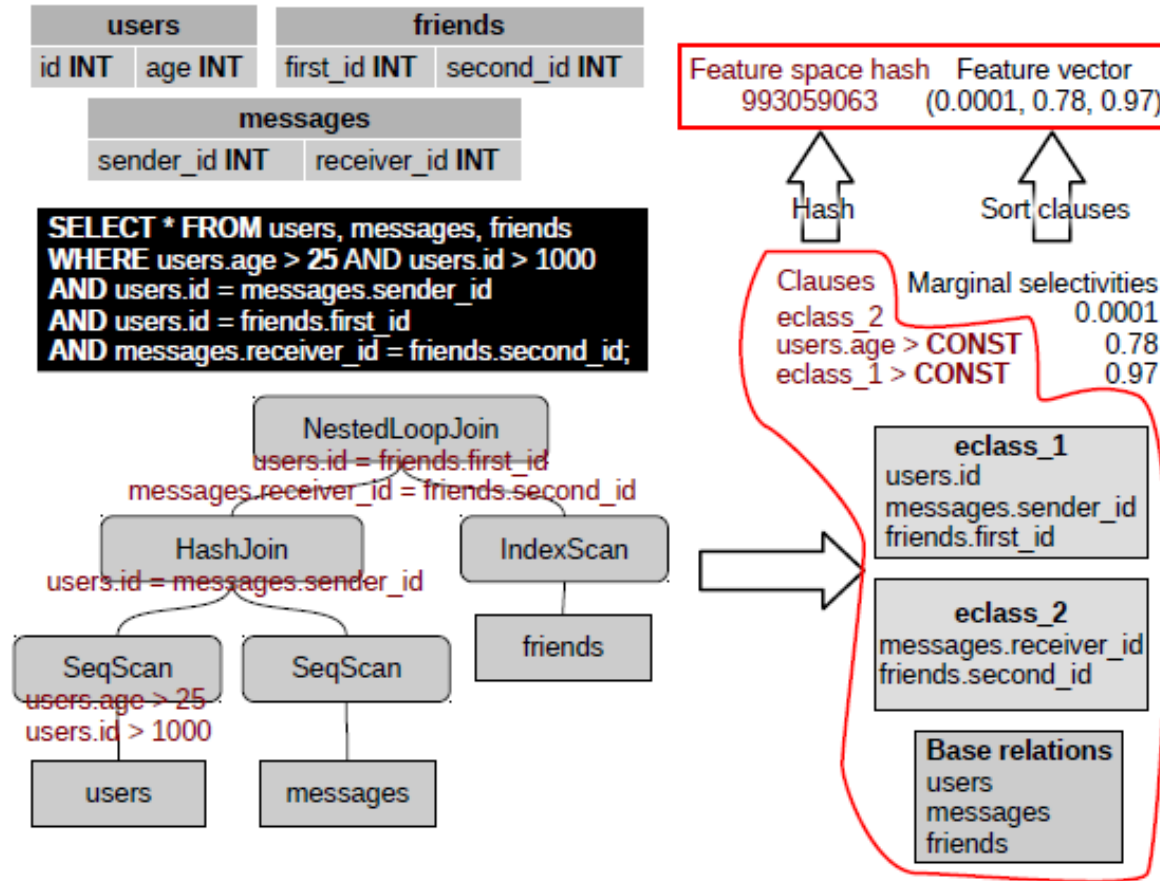- Input

How to formulate the ML problem?

- Important feature

Figure 1: Building machine learning feature space