

# SQL Bug Finder

Input queries below for detecting semantic bugs.

```
select * from category c join ( select distinct pt.category_id from part pt ) pqparts;  
select  c.cname, count(distinct o.pid) as `uniques` from o join c group by c.id having `uniques` > 10;  
SELECT sales.staff.id FROM sales.staff WHERE sales.staff.last_name LIKE '%123' ORDER BY sales.staff.first_name;  
SELECT feedback_id, comment FROM sales.feedbacks WHERE comment LIKE '30!%' ESCAPE '!';
```

Detect bugs

Results are shown below.

```
[query #1] missing join predicate: pqparts  
[query #1] missing join predicate: category  
[query #2] unnecessary group by attribute: c.id  
[query #2] missing join predicate: c  
[query #2] missing join predicate: o  
[query #3] unnecessary index scan: %123  
[query #4] using like without wildcards: comment LIKE '30!%' ESCAPE '!'
```