

# Dynamic PreparedStatements with Variable In Parameters

---

*Source:* <http://coding.derkeiler.com/Archive/Java/comp.lang.java.programmer/2008-03/msg00008.html>

---

- *From:* nico <[roblevintennis@xxxxxxxxxx](mailto:roblevintennis@xxxxxxxxxx)>
  - *Date:* Fri, 29 Feb 2008 22:17:24 -0800 (PST)
- 

I actually posted this at the javaranch forums already. I usually don't 'cross-post' but I haven't figured this out and I HAVE to start coding this tomorrow! Please help. Thanks all. Here's my question:

How to implement Advanced Searching via PreparedStatement. Just to be on the same page so you understand what I'm after, please look at the advanced google search form here:

[http://www.google.com/advanced\\_search?hl=en](http://www.google.com/advanced_search?hl=en)

Notice that the user can input whatever fields they want (one, a few, many, all, it doesn't matter to in respect to what google is requiring of the user). So I have something similar where I have about a dozen fields and I don't want to restrict the user on which combinations of fields they use.

As far as I know, I have to provide the column names and the values can be dynamic using the IN parameters like: name=? AND age=?, etc., but I can't do: ?=? AND ?=?. I'm correct on this aren't I? This is from looking at several examples and having always done it this way myself. However, if I'm wrong and there's an easier way to do this that would be great.

So given my problem statement how would I deal with the multiple combinations of 'chosen' fields by the user without doing this dynamically? (I'm thinking that I WILL have to do this dynamically) So for example with only three fields WITHOUT doing it dynamically I'm conceiving that I'd have to go through this mess:

code:

```
col1=?
col1=? AND col2=?
col1=? AND col3=?
col1=? AND col2=? AND col3=?
col2=?
col2=? AND col3=?
col3=?
...etc...
```

## Dynamic PreparedStatements with Variable In Parameters

So for 10 fields it's going to get ridiculous unless I do it dynamically, or use my first idea of having one PreparedStatement and setting empty fields to sql wildcard '%' so I could just do:  
col1=? AND col2=? AND col3=?.

However, this would not be the most efficient way as the extra search fields, so I am quite keen to find another solution. I have already done a lot of dynamic building of sql so it doesn't bother me to do so if I have to, but I'm just wondering if there's a better way before I commit to that solution. I have to start coding tomorrow so I'm eager to figure this out ASAP. Thanks all!

.