

```
java -cp /Courses/cs360/mysql.jar:
      classname

-----
n/.bashrc
      no space
CLASSPATH=${CLASSPATH}:/Courses/
           cs360/mysql.jar

export CLASSPATH
```

Oct 14-10:02 AM

```
String user = (String)session.
                getAttribute("USERNAME");

if (user == null) { //no one logged in
%>
    <jsp:forward page="login.jsp"/>
    </jsp:forward>
%>
} //end if
%>
```

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```
Static include directive
<%@ include file="header.html" %>

-----
Dynamic include
<jsp:include page="header.jsp" />
```

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```
<A HREF="file.html">Link Text</A>

file.jsp?ID=333445555
           <? id>
```

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Relational Algebra
operates on Relations
 ↳ set of tuples
operations:
 ↳ update/delete/insert
 ↳ change content

- Join
- Projection
- Selection
- Rename
- Set operations: $\cup, \cap, -$

Oct 14-10:44 AM

Selection

$\sigma_{cond}(R)$ $S \leftarrow \sigma_{cond}(R)$ *assignment*

↳ defined on attributes of R

- applies cond. to each $t \in R$
 ↳ tuple ↳ Relation
- result a relation w/ same attr.b. as R containing all of tuples where cond. is true

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Projection $\pi_{\langle \text{attrib list} \rangle}(R)$

subset of columns

$\pi_{\text{fname, lname}}(\sigma_{\text{salary} > 25000}(\text{Employee}))$

~~$\sigma_{\text{salary} > 25000}(\pi_{\text{fname, lname}}(\text{Employee}))$~~

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Rename:

$P(\sigma_{a_1, a_2, \dots, a_n})(R)$

omit \rightarrow σ

new rel name \rightarrow P

new names \rightarrow a_1, a_2, \dots, a_n

$P(\text{first, last})(\pi_{\text{fname, lname}}(\text{Employee}))$

Oct 14-11:07 AM