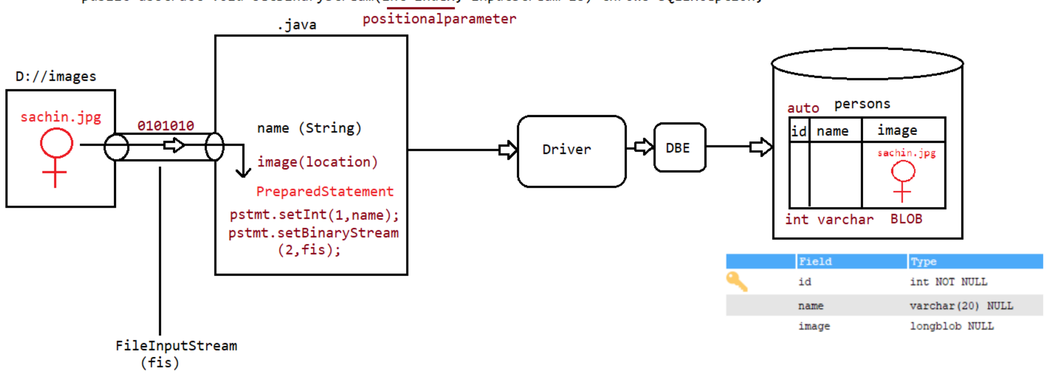
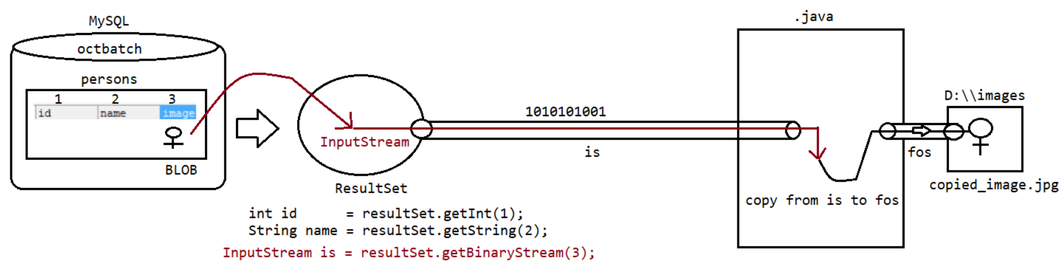
```
String sqlInsertQuery = "insert into persons(`name`,`image`) values (?,?)";
                                                                    1,2
public abstract void setBinaryStream(int index, InputStream is) throws SQLException;
                                     positionalparameter
```



	Field	Type
🔑	id	int NOT NULL
	name	varchar(20) NULL
	image	longblob NULL

Retreival Operation




```
int id      = resultSet.getInt(1);
String name = resultSet.getString(2);
InputStream is = resultSet.getBinaryStream(3);
```

Performance low

```
int i = is.read();
while (i != -1) {
   fos.write(i);
   i = is.read();
}
```

Performance is high,but difficult for developers

```
byte[] b = new byte[1024];
while (is.read(b) > 0)
{
     fos.write(b);
}
```

apache commons-io.jar

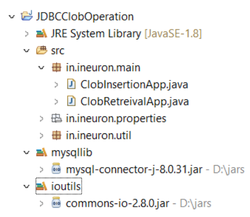
```
IOUtils.copy(is, fos);
```

clob operation

Field	Type
id	int NOT NULL
name	varchar(20) NULL
history	longtext NULL

```
void setCharacterStream(int parameterIndex,Reader reader) throws SQLException;
```

```
pstmt.setCharacterStream(2, new FileReader(new File(pdfLoc)));;
```



Retrieval Operation

```
Reader reader = resultSet.getCharacterStream(3);
File file = new File("history_copied.txt");
FileWriter writer = new FileWriter(file);
IOUtils.copy(reader,writer);
```

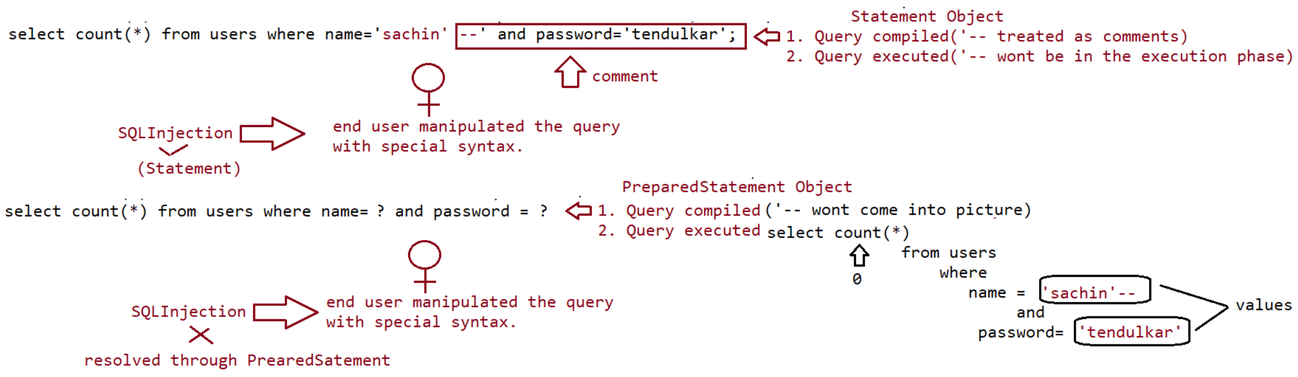
SQLInjection
============

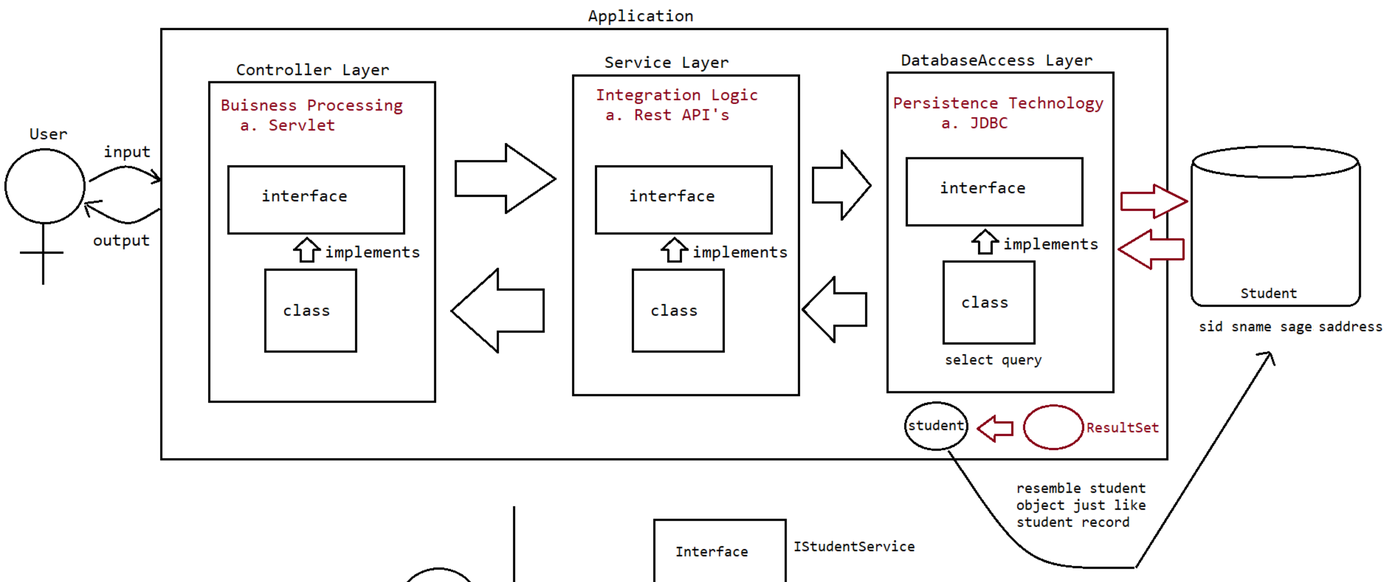
Comments in SQL are of 2 types

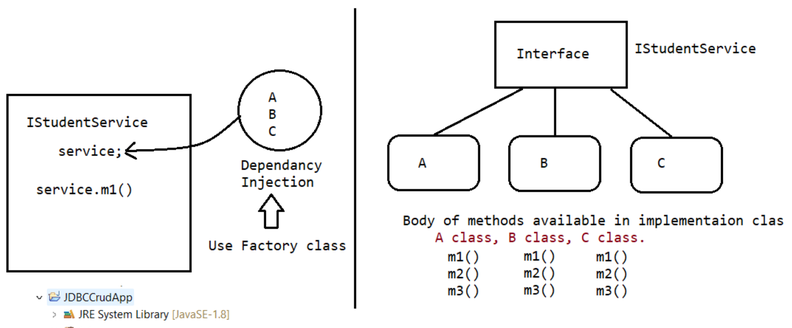
a. -- single line comment

b. /*
multiline comment
*/

eg: select count(*) from users where name='sachin' and password='tendulkar'; => no problem with inputs







Body of methods available in implementaion clas

A class, B class, C class.

A	B	C
m1()	m1()	m1()
m2()	m2()	m2()
m3()	m3()	m3()