1. **Write a Hudson Publisher Plugin**

Ans: Apllication source zip file name is: customer\_hudson.zip

Import Project as Maven project into the eclipse and run it as web application.

2. **Dependency Management**

Writetwo paragraphs on the difference between the following two expressions of "dependencies". It doesn't matter if you recognized what they are. There is no "right" answer to this one. Just tell us a little about what you see as some interesting differences between the two expressions:

a)

  /Users/slim/clojure/cagops/lucene/test:/Users/slim/clojure/cagops/lucene/src:/Users/slim/clojure/cagops/lucene/dev7

  resources:/Users/slim/clojure/cagops/lucene/resources:/Users/slim/clojure/cagops/lucene/target/classes:/Users/slim/

  .m2/repository/clojure7complete/clojure7complete/0.2.3/clojure7complete70.2.3.jar:/Users/slim/.m2/repository/org/cl

  ojure/tools.nrepl/0.2.3/tools.nrepl70.2.3.jar:/Users/slim/.m2/repository/jakarta7regexp/jakarta7regexp/1.4/jakarta7

  regexp71.4.jar:/Users/slim/.m2/repository/org/apache/lucene/lucene7sandbox/4.3.1/lucene7sandbox74.3.1.jar:/Users/sl

  im/.m2/repository/org/apache/lucene/lucene7queries/4.3.1/lucene7queries74.3.1.jar:/Users/slim/.m2/repository/org/ap

  ache/lucene/lucene7queryparser/4.3.1/lucene7queryparser74.3.1.jar:/Users/slim/.m2/repository/org/apache/lucene/luce

  ne7analyzers7common/4.3.1/lucene7analyzers7common74.3.1.jar:/Users/slim/.m2/repository/org/apache/lucene/lucene7cor

  e/4.3.1/lucene7core74.3.1.jar:/Users/slim/.m2/repository/org/clojure/clojure/1.5.1/clojure71.5.1.jar

Ans: this dependency is basically resource directory description for the dependency jars which implies all maven dependency according to the jars.

b)

:dependencies [

                [org.clojure/clojure                       "1.5.1"]

                [org.apache.lucene/lucene7core             "4.3.1"]

                [org.apache.lucene/lucene7analyzers7common "4.3.1"]

                [org.apache.lucene/lucene7queryparser      "4.3.1"]

              ]

**Ans:** Above dependency is resource dependency which is a hierarchical, build process will complete by using resource dependency from top to bottom.

**3. Create a web application of books with the db of your choice and expose a JSON REST API.**

Ans: Application source zip file name is : restdemo.zip

Web Application has been created with the following functional properties:

1. Value Object classes:
   1. AuthorVO.java
   2. BookVO.java
   3. CategoryVO.java

These classes are value object classes which are responsible for the getter/setter values of each entity values i.e. encapsulation of entity data

1. DAO Object Classes:
   1. AuthorDAO.java
   2. BookDAO.java
   3. CategoryDAO.java

These classes are responsible for the basic function method of data layer interaction with the different purpose like Summary, Detail, Update, and Delete.

1. Resources Object Classes:
   1. AuthorResources.java
   2. BookResources.java
   3. CategoryResources.java

These classes are responsible for the Produce and Consume the web service data to the http request/response. It used the GET/POST/PUT/DELETE protocols to publish/subscribe the web service data.

1. JDBC Connection Classes:
   1. BaseJDBC.java

This class is responsible for the JDBC connection to the Oracle using the jdbc oracle driver. All DAOs are getting connection with the ORACLE DB using the partially generic jdbc class BaseJDBC.java. Only one connection property has been defined into the BaseJDBC class to be used for all DAO.

1. Web services can be accessed via following URLs:
   1. http:// localhost:8080/restdemo/services/category/
   2. http:// localhost:8080/restdemo/services/category/1
   3. http:// localhost:8080/restdemo/services/author/
   4. http:// localhost:8080/restdemo/services/author/1
   5. http:// localhost:8080/restdemo/services/book/
   6. http:// localhost:8080/restdemo/services/book/1

On starting of the application crud will displayed with the Book summary.

**4. Write a program to sort a input text file. You can use any programming language you would like.**

Ans: Program zip file name is : Sorting Program.zip

Sorting program is added with the perl text input file generator file as well.

This program will take input of dat file which will be getting sort by collections utill.

Also the program will not take more than 999999 lines or 1 gb file