'Problems 1, 2, 3'

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Assignment 5

Problem 1)

R1.1

MovieTitle, Director → Producer

SPTitle, Author → Temp

SPTitle, Author, SceneNo → StoryLocation, FilmLocation

ActorName → Phone, Address, AgentName

SPTitle, Author, SceneNo, TakeNo → Date, Time

ActorName, SceneNo → StoryLocation, FilmLocation

ActorName, SceneNo, TakeNo → Date, Time

R1.2

MovieTitle, Director → Producer

SPTitle, Author → Temp

SPTitle, Author, SceneNo → StoryLocation, FilmLocation

ActorName → Phone, Address, AgentName

SPTitle, Author, SceneNo, TakeNo → Date, Time

ActorName, SceneNo → StoryLocation, FilmLocation

ActorName, SceneNo, TakeNo → Date, Time

R1.3

[MovieTitle, Director | Producer] <u>MovieTitle</u>, Director → Producer

[SPTitle, Author|]
<u>SPTitle, Author</u> → Temp

[SPTitle, Author, SceneNo| StoryLocation, FilmLocation]
SPTitle, Author, SceneNo → StoryLocation, FilmLocation

[ActorName | Phone, Address, AgentName]
<u>ActorName</u> → Phone, Address, AgentName

[SPTitle, Author, SceneNo, TakeNo | Date, Time] <u>SPTitle, Author, SceneNo, TakeNo</u> → Date, Time

[ActorName, SceneNo | StoryLocation, FilmLocation]

ActorName, SceneNo, TakeNo → Date, Time

[ActorName, SceneNo, TakeNo | Date, Time] <u>SPTitle, Author, SceneNo, TakeNo</u> → Date, Time

Problem 2)

R2.1

Code → title, publisher, date

SongID \rightarrow title, composer

UserID → password, name, emailAddress

SongID, Code → length, page

UserID, Code → pdfFileName, PageOffset

R2.2

 $\underline{\text{Code}} \rightarrow \text{title}$, publisher, date

<u>SongID</u> → title, composer

<u>UserID</u> → password, name, emailAddress

 $\underline{SongID}, \underline{Code} \rightarrow length, page$

<u>UserID</u>, <u>Code</u> → pdfFileName, PageOffset

R2.3

[Code | title,publisher,date]

 $\underline{\text{Code}} \rightarrow \text{title}$, publisher, date

[SongID | title,composer]

<u>SongID</u> → title, composer

[UserID | password,name,emailAddress,title]

 $\underline{UserID} \rightarrow password, name, emailAddress$

[SongID,Code | length,page]

SongID, Code → length, page

[UserID,Code | pdfFileName,PageOffset]

<u>UserID</u>, <u>Code</u> → pdfFileName, PageOffset

Problem 3)

R3.1

```
stdnum \rightarrow name, strnum, street, postcode, area_code, office_code, station_code, email email \rightarrow student area_code, office_code \rightarrow city postcode \rightarrow city course_num \rightarrow department_name period, room_number, term \rightarrow course_section room_num \rightarrow building stdnum, course_num, course_section \rightarrow grade
```

R3.2

```
stdnum \rightarrow strnum

stdnum \rightarrow street

stdnum \rightarrow postcode

stdnum \rightarrow area_code

stdnum \rightarrow office_code

stdnum \rightarrow station_code

stdnum \rightarrow email

email \rightarrow student

area_code,office_code \rightarrow city

postcode \rightarrow city

course_num \rightarrow department_name

period,room_number,term \rightarrow course_section

room_num \rightarrow building

stdnum,course_num,course_section \rightarrow grade
```

R3.3

```
[stdnum | name,strnum,street,postcode,area_code,office_code,station_code,email]
[email | student]
[area_code,office_code | city]
[postcode | city]
[course_num | department_name]
[period,room_number,term | course_section]
[room_num | building]
[stdnum,course_num,course_section | grade]
[stdnum,course_num,period,room_number,term,room_num | ]
```