

Q1

```
SELECT TOP 5 TagName,Count FROM Tags ORDER BY Tags.Count DESC ;
SELECT COUNT(*) FROM post;
SELECT COUNT(*) From tagonly WHERE Tag1='r' or Tag2='r' or Tag1='regression'
or Tag2='regression' or Tag3='regression' or Tag4='regression'
or Tag1='time-series' or Tag2='time-series' or Tag3='time-series'
or Tag1='machine-learning' or Tag2='machine-learning' or Tag3='machine-learning'
or Tag1='probability' or Tag2='probability' or Tag3='probability' or Tag4='probability';
```

Q2

```
SELECT AVG(Score) FROM post WHERE post.PostTypeId=1;
SELECT AVG(Score) FROM post WHERE post.PostTypeId=2;
```

Q3

```
CREATE TABLE pearson (TotalScore int, PostCount int,Id int,Reputation int);
INSERT INTO pearson
SELECT SUM(post.Score),COUNT(users.Id),users.id,users.Reputation
FROM post, users WHERE users.Id=post.OUI GROUP BY users.Id,users.Reputation;
## in R
pearson<-read.csv("file:///Users/zhangyuting/Desktop/xml/pearson.csv")
cor(pearson[,c("TotalScore","Reputation")],method="pearson")
```

Q4

```
SELECT AVG(users.UV)
FROM post, users WHERE users.Id=post.OUI and post.PostTypeId=1;
SELECT AVG(users.UV)
FROM post, users WHERE users.Id=post.OUI and post.PostTypeId=2;
```

Q5

```
CREATE TABLE answer(answerId int, ADate datetime,AOUI int);
INSERT INTO answer
SELECT post.Id,post.CD,OUI FROM post
WHERE PostTypeId=2;
CREATE TABLE question(questionId int, AAId int,QDate datetime,QOUI int);
INSERT INTO question
SELECT post.Id,post.AAI,post.CD,OUI FROM post
WHERE PostTypeId=1 and AAI is not NULL;
SELECT questionId,AAId,answerId,ADate,QDate,
DATEDIFF(HOUR,QDate,ADate) AS response
FROM answer JOIN question On AAId=answerId ORDER BY response DESC;
```

Q6

```
SELECT users.Id, DATEDIFF(HOUR,users.CD,ADate) AS ATime,
DATEDIFF(HOUR,users.CD,QDate) AS QTime,
DATEDIFF(HOUR,users.CD,comments.Date) AS CTime
FROM answer,users,question,comments
WHERE AOUI=users.Id and QOUI=users.Id and comments.Id=users.Id;
### save query as "sequence.csv" and write codes in R
```

Q6 second part using R