

# HW1 REPORT

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## PART 2:

#1

```
Table User(uid          char(10),
          email_contracts char(20),
          registration_date Date,
          user_type       char(20),
          email           char(20),
          first_name      char(20),
          last_name       char(20),
          country         char(20),
          zip             char(10)
)
```

#2

```
Table connect(sender_uid char(10),
             receiver_uid char(10))
```

sender\_uid is the foreign key referencing User,

receiver\_uid is the foreign key referencing User

#3

```
Table Resource(rid      char(10),
              uid       char(10),
              pid       char(10),
              link      char(50),
              type      char(20)
)
```

uid is the foreign key referencing User,

pid is the foreign key referencing Post

#4

```
Table Post(pid      char(10),
          uid       char(10),
          datetime  Date,
          post_type char(20),
          content   char(200),
          share_type char(20),
          like_count integer,
          comment_count integer)
```

uid is the foreign key referencing User

#5

```
Table Comment( cid          char(10),
               pid          char(10),
               uid          char(10),
               is_shared    bool,
               is_liked      bool,
               datetime     Date,
               content      char(200)
               )
```

uid is the foreign key referencing User,

pid is the foreign key referencing Post

#6

```
Table group(gid      char(10),
           group_name char(50))
```

#7

```
Table join( uid      char(10),
           gid      char(10),
           datetime Date)
```

uid is the foreign key referencing User,

gid is the foreign key referencing group

#8

```
Table Company( comp_id   char(10),
              company_name char(50))
```

#9

```
Table follow( uid      char(10),
              comp_id   char(10),
              datetime  Date)
```

uid is the foreign key referencing User,

comp\_id is the foreign key referencing Company

## PRAT 4

Inner join creates a new result table by combining column values of two tables. In my opinion, if all you need is to check for matching rows in the other table but don't need any columns from that table, use IN. If you do need columns from the second table, use Inner Join.

When large amount of information is invoked, the result table could be large. So we had better use **INNER JOIN** rather than **IN**.

When modifying the table design, we could use less table to hold the same amount of information. Also, let the search results be in less table. In other words, make each table holds more possible information. In this way, we could use **IN** or **INNER JOIN** less times to improve its performance.