taskID -> EmployeeID
taskID -> listTitle
listTitle -> pID
taskID -> pID (Armstrong Axiom of transivity)


```
CREATE TABLE TasksIn (
        int tID PRIMARY KEY,
        date DueDate,
        text Description,
        Int listID,
        Int pID,
        FOREIGN KEY (pID, listID) REFERENCES List(pID, ListID)
)


CREATE TABLE AssignedTo(
        Int eID,
        Int taskID,
        PRIMARY KEY (eID, taskID),
        FOREIGN KEY eID REFERENCES Employee (eID),
        FOREIGN KEY taskID REFERENCES Tasks (taskID),
)
```

2: List of all members of a project board

```
SELECT      R.name
FROM        RegularW R, WorksOn W
WHERE       R.eID = W.eID AND pID = _____
```

3: Coworker wants to see all the project-boards they're on

```
SELECT      p.title
FROM        ProjectBoard P, WorksOn W, Employee E
WHERE       E.eID = W.eID AND W.pID = p.pID
```

4: Employee wants to see all tasks they have due before July 1st

```
SELECT      T.TaskTitle,
FROM        Task T, List L, ProjectBoard P, Employee E, WorksOn W
WHERE       E.eID = W.eID AND W.pID = P.pID AND L.pID = P.pID AND T.lID = L.lID
AND T.dueDate < ____
```

5: Employee wants to add a task to a project board

```
INSERT INTO Task(pID, listID, taskID, taskTitle, dueDate)
VALUES (___,___,___,___,___)
```

6: Manager wants to see all tasks over all project boards due within a certain time frame

```
SELECT      T.taskTitle
FROM Task T
WHERE       T.dueDate > _____ AND T.dueDate <= _____
```

7: Manager wants to delete a list? Task? Board?

```
DELETE FROM Task
WHERE taskTitle = _____;
```

8: Changing the name of a list/task/board

```
UPDATE ProjectBoard
SET projectTitle = newTitle
WHERE pID = __ ;
```

```
UPDATE Lists
SET listTitle= newTitle
WHERE lID = __ ;
```

```
UPDATE Tasks
SET taskName = newName
WHERE tID = __;
```

1. Employee wants to see the creation dates of the project boards they're in

```
Select P.CreateDate, P.ProjectTitle
FROM ProjectBoard P, WorksOn W, Employee E,
WHERE W.pID = P.pID, W.eID = E.eID
```

2. Employee's permissions are updated to that of a manager's

   UPDATE Employee
   SET permissions = (manager?)
   WHERE Ename = __ ;

3. An employee quits, so they're removed from all project boards they're on.

   DELETE FROM Employee
   WHERE eID = __ ;

4. Manager wants to see all project boards in existence

   SELECT projectTitle
   FROM ProjectBoard
   ORDER BY projectTitle

5. List of all project boards an employee is a member of

   SELECT P.projectTitle
   FROM WorksOn W, Employee E, ProjectBoard P,
   WHERE W.eID = E.eID AND W.pID = P.pID;

6. The number of project boards an employee is a member of

   SELECT count(W.pID)
   FROM WorksOn W, Employee E,
   WHERE W.eID = E.eID and E.eID = __;

DATA

// Generate new users

INSERT INTO `Users` (`id`,`isManager`,`username`,`password`) VALUES (1,0,"est.arcu.ac@lobortismaurisSuspendisse.edu","GNB65HDI5QV"),(2,0,"convallis.in@ipsumPhasellusvitae.com","EDO87JRW0NU"),(3,1,"adipiscing.elit.Etiam@egestas.net","MSG70JAS3QB"),(4,0,"congue.a.aliquet@augueut.edu","VCS25HKL0KB"),(5,0,"ac.mi.eleifend@auctor.edu","FVH78AED4GD"),(6,1,"ut.molestie@ornareplaceratorci.edu","JQZ54PSQ2QP"),(7,1,"blandit.viverra@neccursus.edu","YME63MRS2VI"),(8,0,"libero.lacus@Namac.org","NIP95YEX2SG"),(9,1,"lobortis.tellus@Nullam.org","PZA54YVO5DD"),(10,0,"a.tortor@sapienimperdietornare.com","NEB41JAS8TN");
INSERT INTO `Users` (`id`,`isManager`,`username`,`password`) VALUES (11,0,"erat.eget@eratVivamusnisi.org","DIZ31BPJ0KC"),(12,0,"sem.ut.cursus@montesnasceturridiculus.co.uk","SGL71XGN2IM"),(13,0,"ultrices.a@blanditcongueIn.com","CSG79OYO9NA"),(14,1,"fringilla.mi@semper.org","DPN20KCA4HQ"),(15,0,"Quisque.varius.Nam@ipsumdolor.ca","QNN10QDY0IG"),(16,0,"Sed.malesuada@vitae.ca","VLC25ARF8FI"),(17,1,"tempus.non@idblanditat.net","SDO76XLF6MJ"),(18,0,"leo.Morbi.neque@Aliquamadipiscinglobortis.edu","LQK22OWW2IN"),(19,0,"Curae.Phasellus.ornare@aptenttacitisociosqu.ca","CYX88MUP1AZ"),(20,0,"hendrerit.id.ante@erat.com","RQC19RRM2JP");
INSERT INTO `Users` (`id`,`isManager`,`username`,`password`) VALUES (21,1,"turpis.non@aptenttaciti.org","FVB42RFF8GM"),(22,0,"justo.Proin.non@orcilacusvestibulum.org","KQQ45NEX8MJ"),(23,0,"et@Proinnisl.co.uk","SXK40CPC5IV"),(24,1,"Nunc.quis.arcu@lectusjusto.net","WGT59IDP4JY"),(25,0,"Vivamus@Proinnislsem.org","SON11SKM0UW"),(26,1,"felis.adipiscing@non.org","USL96ARW7VC"),(27,0,"ipsum.dolor@pede.org","TFH58VED3WR"),(28,0,"Nam.nulla@adipiscingelit.ca","ZKI97EPE1BJ"),(29,1,"ullamcorper@nonenim.co.uk","BOY89AZL0AM"),(30,1,"fames.ac.turpis@eratEtiamvestibulum.net","XGY21PSC4MD");
INSERT INTO `Users` (`id`,`isManager`,`username`,`password`) VALUES (31,1,"Aliquam.rutrum@eget.com","ZME54LEU4IZ"),(32,0,"enim.commodo.hendrerit@etarcuimperdiet.co.uk","QVS86BLO9WS"),(33,1,"aliquam.iaculis.lacus@consequat.edu","AMJ08HUV2LJ"),(34,0,"ultrices@elitelit.co.uk","HYN94BKD1XG"),(35,1,"lorem@aarcuSed.com","QHL55JDT8MO"),(36,0,"litora.torquent@arcuAliquam.edu","LIV57CNM6LG"),(37,0,"varius@antedictum.co.uk","KQA11KGV2US"),(38,1,"massa@maurisrhoncusid.ca","STJ37BED0YT"),(39,0,"parturient.montes@lobortis.ca","BIF00ZAF2EG"),(40,1,"aliquam.enim@eueuismodac.ca","RDI36BVC2ST");

// Generate new projects

INSERT INTO `Projects` (`id`,`title`) VALUES (1,"lectus quis massa."),(2,"tristique neque"),(3,"tortor. Nunc commodo auctor velit."),(4,"erat"),(5,"sed pede. Cum sociis natoque"),(6,"ipsum dolor sit amet,"),(7,"arcu. Curabitur ut odio vel"),(8,"posuere,"),(9,"fringilla est. Mauris"),(10,"et nunc. Quisque");

// Generate WorksOn table

```sql
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (1,1),(1,2),(1,3),(1,4),(1,5);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (2,6),(2,7),(2,8);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (3,9),(3,10),(3,11);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (4,12),(4,13),(4,14),(4,15),(4,16);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (5,17),(5,18),(5,19),(5,20),(5,21);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (6,22),(6,23),(6,24);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (7,25),(7,26),(7,27),(7,28),(7,29),(7,30);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (8,31),(8,32),(8,33);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES
(9,34),(9,35),(9,36),(9,37),(9,38),(9,39),(9,40);
INSERT INTO `WorksOn` (`projectId`,`userId`) VALUES (10,16),(10,23),(10,24);


// Generate Lists

INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (1,1,"Fusce
aliquam,","Medium"),(2,1,"justo. Proin","Low"),(3,1,"Vestibulum ante ipsum primis
in","Low"),(4,1,"odio tristique pharetra. Quisque","Medium");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES
(5,2,"nec","Medium"),(6,2,"Aenean","Low");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (7,3,"Donec egestas. Duis
ac","Low"),(8,3,"odio, auctor vitae, aliquet nec,","High"),(9,3,"massa. Mauris vestibulum,
neque","Low");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (10,4,"parturient montes,
nascetur","Low"), (11,4,"elit erat vitae
risus.","High"),(12,4,"dignissim","High"),(13,4,"non,","Low"),(14,4,"tempor bibendum. Donec
felis","Medium");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES
(15,5,"imperdiet","Low"),(16,5,"Aliquam tincidunt, nunc ac","Low");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (17,6,"libero et tristique
pellentesque, tellus","Medium");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (18,7,"egestas blandit. Nam nulla
magna,","Medium"),(19,7,"odio a purus.","Low"),(20,7,"rhoncus id, mollis nec,","High");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (26,9,"nascetur ridiculus
mus.","High"),(27,9,"Vestibulum ut","Low"),(28,9,"vitae, erat.","Medium");
INSERT INTO `Lists` (`id`,`projectId`,`title`,`priority`) VALUES (29,10,"quis,
tristique","Medium"),(30,10,"Vestibulum ut eros non","Medium");

// Generate Tasks
INSERT INTO `Tasks`
(`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES
(1,1,3,"eleifend. Cras sed leo.","auctor, nunc nulla","2018-07-24",4),(2,1,3,"consectetuer
adipiscing elit. Aliquam","accumsan sed,","2018-08-27",1),(3,1,1,"ipsum.","Aenean eget metus.
In nec orci. Donec nibh. Quisque nonummy","2018-08-03",4),(4,1,2,"pellentesque massa lobortis
```

ultrices. Vivamus","dui nec urna suscipit nonummy. Fusce","2018-08-08",1),(5,1,3,"dolor quam, elementum at, egestas","leo. Morbi neque tellus,","2018-08-14",2),(6,1,1,"vulputate eu, odio. Phasellus","Aliquam erat volutpat. Nulla facilisis.","2018-08-05",4),(7,1,2,"viverra. Donec tempus, lorem fringilla","risus, at fringilla purus mauris a nunc.","2018-08-06",3),(8,1,2,"velit. Aliquam nisl. Nulla eu","amet luctus vulputate, nisi sem semper erat,","2018-08-30",1),(9,1,3,"Integer id magna et","lectus","2018-08-20",1),(10,1,4,"dolor. Fusce feugiat. Lorem","vestibulum, neque sed dictum","2018-08-27",1);
INSERT INTO `Tasks` (`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES (11,2,6,"feugiat tellus","quis diam. Pellentesque habitant morbi tristique senectus et","2018-08-20",6),(12,2,5,"Vestibulum","dui, nec tempus mauris erat eget","2018-08-04",6),(13,2,6,"tortor. Nunc commodo auctor","velit egestas lacinia. Sed congue, elit sed consequat auctor,","2018-08-07",6),(14,2,6,"Integer vulputate, risus a ultricies","consequat","2018-08-19",8),(15,2,6,"faucibus lectus,","Integer id magna et ipsum cursus vestibulum. Mauris magna.","2018-08-02",7),(16,2,6,"venenatis vel,","congue turpis. In condimentum.","2018-08-10",7),(17,2,5,"quis,","dictum eu, placerat eget, venenatis a, magna. Lorem","2018-08-17",6),(18,2,5,"dolor. Quisque tincidunt pede ac","enim. Suspendisse aliquet, sem ut cursus luctus, ipsum leo elementum","2018-08-28",8),(19,2,6,"sollicitudin","malesuada fringilla","2018-08-20",6),(20,2,6,"magna. Suspendisse tristique neque","Suspendisse","2018-08-08",6);
INSERT INTO `Tasks` (`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES (21,4,7,"enim. Curabitur massa. Vestibulum","lacinia","2018-08-07",12),(22,4,9,"Vestibulum ante","sit amet, consectetuer adipiscing elit. Etiam laoreet, libero et tristique","2018-07-31",12),(23,4,9,"nec, mollis","cursus luctus, ipsum leo elementum","2018-08-25",12),(24,4,9,"lacus, varius et,","cursus et, magna. Praesent interdum ligula eu","2018-08-12",14),(25,4,9,"egestas","nunc id enim. Curabitur massa. Vestibulum","2018-07-26",16),(26,4,8,"Vivamus non","mus. Proin vel nisl.","2018-08-02",13),(27,4,7,"Praesent luctus. Curabitur egestas","dolor sit amet, consectetuer adipiscing elit. Etiam laoreet,","2018-08-23",14),(28,4,8,"Donec dignissim","neque. In ornare sagittis felis.","2018-07-25",14),(29,4,8,"felis ullamcorper viverra. Maecenas iaculis","at pretium aliquet, metus","2018-07-30",15),(30,4,7,"vel sapien imperdiet ornare. In","mauris eu elit. Nulla facilisi. Sed neque.","2018-08-28",16);
INSERT INTO `Tasks` (`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES (31,5,16,"ligula tortor,","odio. Aliquam vulputate","2018-08-13",19),(32,5,15,"Mauris eu turpis. Nulla aliquet.","tempor augue ac ipsum. Phasellus vitae mauris sit","2018-08-16",18),(33,5,15,"tortor.","non arcu. Vivamus sit amet risus.","2018-08-25",20),(34,5,16,"cubilia Curae; Donec","tristique senectus et netus et","2018-08-13",19),(35,5,15,"facilisis","libero. Proin mi. Aliquam gravida mauris ut mi.","2018-08-09",20),(36,5,16,"facilisis eget, ipsum. Donec sollicitudin","nascetur ridiculus mus. Donec dignissim magna a tortor. Nunc","2018-07-29",19),(37,5,15,"risus. Donec","iaculis nec, eleifend non,","2018-08-25",17),(38,5,15,"ac, feugiat non,","neque. In ornare sagittis felis. Donec","2018-08-17",17),(39,5,15,"Maecenas","nulla.","2018-07-25",18),(40,5,15,"commodo ipsum. Suspendisse non leo.","placerat","2018-08-25",17);

```sql
INSERT INTO `Tasks`
(`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES
(41,6,17,"euismod urna. Nullam lobortis","nunc id enim. Curabitur","2018-08-
07",24),(42,6,17,"Curabitur ut odio vel","amet luctus vulputate,","2018-08-
09",24),(43,6,17,"condimentum","id magna et ipsum cursus vestibulum.","2018-08-
29",23),(44,6,17,"tristique pharetra.","venenatis a, magna. Lorem ipsum dolor sit amet,
consectetuer adipiscing","2018-08-28",24),(45,6,17,"magna et ipsum","odio. Aliquam
vulputate","2018-07-30",23),(46,6,17,"tincidunt adipiscing. Mauris molestie pharetra","tempus eu,
ligula. Aenean euismod mauris eu elit. Nulla","2018-08-03",23),(47,6,17,"aliquam adipiscing
lacus.","Curabitur massa. Vestibulum accumsan neque et nunc.","2018-08-
17",23),(48,6,17,"libero est, congue a,","Pellentesque tincidunt tempus","2018-07-
31",24),(49,6,17," quam vel sapien","diam.","2018-08-23",23),(50,6,17,"Phasellus fermentum
convallis","risus. In mi pede, nonummy ut, molestie","2018-08-26",23);
INSERT INTO `Tasks`
(`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES
(51,7,19,"enim non nisi.","tempus mauris erat eget","2018-08-10",27),(52,7,18,"nunc sed pede.
Cum","lectus ante dictum","2018-08-08",28),(53,7,19,"posuere at, velit. Cras lorem","rhoncus.
Proin","2018-08-03",26),(54,7,18,"lorem tristique aliquet. Phasellus fermentum","id risus","2018-
08-01",27),(55,7,18,"Vivamus euismod urna.","lacus. Quisque purus sapien, gravida non,
sollicitudin a, malesuada","2018-07-23",28),(56,7,19,"Mauris eu","scelerisque scelerisque dui.
Suspendisse ac metus","2018-07-28",30),(57,7,18,"lectus ante dictum","eget, volutpat ornare,
facilisis eget, ipsum. Donec sollicitudin adipiscing","2018-08-06",30),(58,7,20,"a
sollicitudin","dictum. Phasellus in felis. Nulla","2018-08-13",27),(59,7,19,"mauris blandit mattis.
Cras","ante","2018-08-09",29),(60,7,20,"mattis.","dapibus id, blandit at, nisi. Cum sociis
natoque","2018-08-29",25);
INSERT INTO `Tasks`
(`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES
(61,9,28,"nec, diam. Duis mi enim,","Ut tincidunt vehicula risus. Nulla eget","2018-07-
23",39),(62,9,27,"enim","enim. Mauris quis turpis vitae purus","2018-08-
22",34),(63,9,27,"mi","nibh lacinia orci, consectetuer euismod est arcu ac orci.","2018-08-
18",37),(64,9,27,"hendrerit id,","leo, in lobortis tellus justo sit amet nulla. Donec","2018-07-
23",39),(65,9,28,"eu, ligula. Aenean","quis, tristique ac, eleifend vitae, erat. Vivamus nisi.","2018-
08-19",38),(66,9,26,"est arcu ac orci. Ut","Vivamus rhoncus. Donec est. Nunc ullamcorper, velit
in","2018-07-25",34),(67,9,27,"nulla. In tincidunt congue turpis.","lacinia mattis. Integer
eu","2018-07-31",40),(68,9,27,"nulla. In","egestas. Aliquam nec","2018-08-
09",37),(69,9,28,"Donec tempus,","Nullam","2018-07-28",35),(70,9,28,"eleifend nec, malesuada
ut,","gravida nunc sed pede. Cum sociis natoque penatibus","2018-07-29",40);
INSERT INTO `Tasks`
(`id`,`projectId`,`listId`,`taskName`,`taskDescription`,`taskDueDate`,`assignedTo`) VALUES
(71,10,29,"Donec dignissim","risus. Quisque libero lacus, varius et, euismod et, commodo
at,","2018-07-27",16),(72,10,29,"justo eu arcu. Morbi","dictum eu, eleifend nec,","2018-07-
26",16);
```