Northeastern University
College *of* Engineering

Northeastern University
Data Management and Database Design
INFO 6210
Spring 2018

Final Project Report- Northeastern University Gym Database "NUBase"

Name: Gaurav Raj Chattarki
NUID: 001851611

Contents **Page**

Business Case and Goal

The project was conceived with the thought of improving the overall operations of the Gymnasiums at Northeastern University by creating a database to prove as a first point of reference for students, faculty, supervisors and top management for decision making.

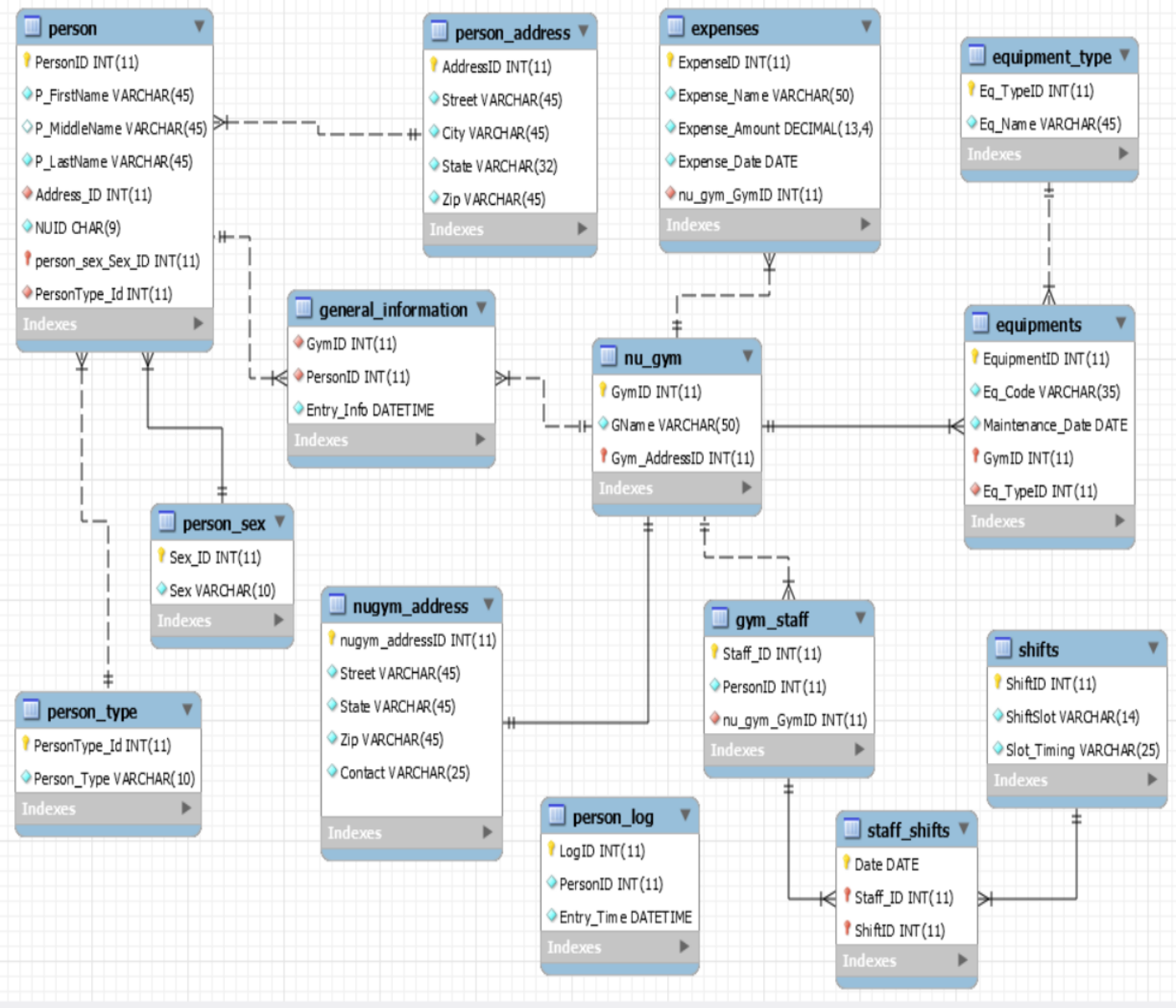
The goal of the project is to allow complete transparency in the overall operations of the gym including the people as both customers and owners of it, expenses carried out, working schedule established and equipment of the facilities. From students or faculty visiting a particular facility to the staff involved in running the facility, from equipment and maintenance to liabilities.

BUSINESS CASE

- To serve as standalone database for northeastern gym.
- Complete information on visitors, staff, equipment and staff.
- Quick views and log tables for pacey decision making

Visitors	Staff	Northeastern Management
Name	Shifts	Track of equipment
Address	Operation	Expenses
Gym Visited	Student Traffic for Management	Surveillance and Data Analysis

ER Diagram



Triggers

For this project, triggers is being used in two instaces,

1) After **Inserting** values into the General Information table.
2) After **Updating** values in the General Information table.

When the above insatnces take place a trigger is invoked and this trigger, feeds in the data in the Log table for archive and retrieve purposes.

The code is as follows,

1)

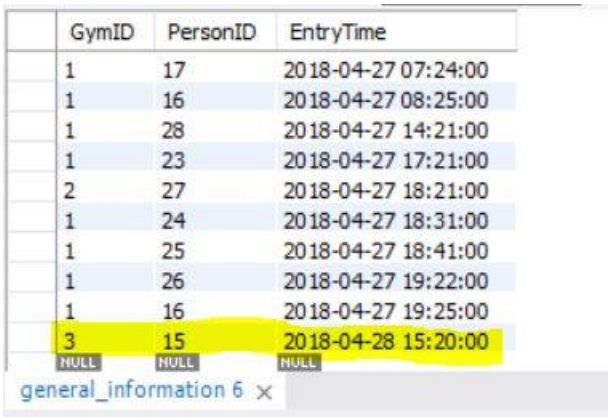
```
-- -----------------------------------------------------------
-- Trigger for "after inserting" the `general_information` table
-- -----------------------------------------------------------

DELIMITER $$
USE `try1`$$
CREATE DEFINER = CURRENT_USER TRIGGER `try1`.`general_information_AFTER_INSERT` AFTER INSERT ON `general_information` FOR EACH ROW
BEGIN

Insert into person_log values (Null, new.PersonID, new.EntryTime);
END$$
DELIMITER ;
```

2)

```
-- Trigger for "after update"  the `general_information` table
-- -----------------------------------------------------------

DROP TRIGGER IF EXISTS `try1`.`general_information_AFTER_UPDATE`;
DELIMITER $$
USE `try1`$$
CREATE DEFINER = CURRENT_USER TRIGGER `try1`.`general_information_AFTER_UPDATE` AFTER UPDATE ON `general_information` FOR EACH ROW
BEGIN

Insert into person_log values (Null, new.PersonID, new.EntryTime);

END$$
DELIMITER
```

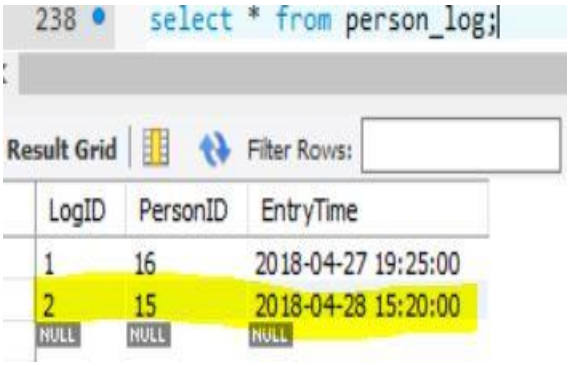
The results of the above two scenarios are given in the following page,
Result 1)

General Information Table Log Table (Trigger output)



GymID	PersonID	EntryTime
1	17	2018-04-27 07:24:00
1	16	2018-04-27 08:25:00
1	28	2018-04-27 14:21:00
1	23	2018-04-27 17:21:00
2	27	2018-04-27 18:21:00
1	24	2018-04-27 18:31:00
1	25	2018-04-27 18:41:00
1	26	2018-04-27 19:22:00
1	16	2018-04-27 19:25:00
3	15	2018-04-28 15:20:00
NULL	NULL	NULL

general_information 6



```
238 •  select * from person_log;
```

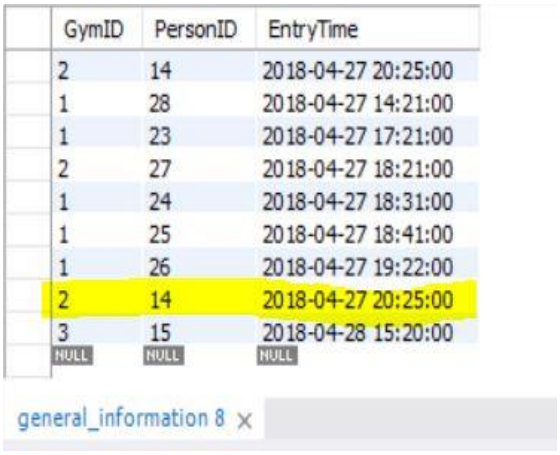
Result Grid | Filter Rows:

LogID	PersonID	EntryTime
1	16	2018-04-27 19:25:00
2	15	2018-04-28 15:20:00
NULL	NULL	NULL

The above figures show that after inserting values into the General table, the trigger feeds value into the Log Table.

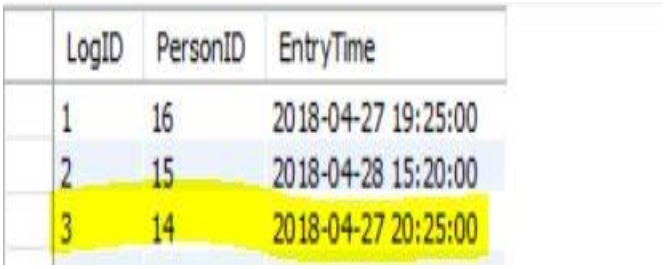
Result 2)

General Information Table



GymID	PersonID	EntryTime
2	14	2018-04-27 20:25:00
1	28	2018-04-27 14:21:00
1	23	2018-04-27 17:21:00
2	27	2018-04-27 18:21:00
1	24	2018-04-27 18:31:00
1	25	2018-04-27 18:41:00
1	26	2018-04-27 19:22:00
2	14	2018-04-27 20:25:00
3	15	2018-04-28 15:20:00
NULL	NULL	NULL

general_information 8



LogID	PersonID	EntryTime
1	16	2018-04-27 19:25:00
2	15	2018-04-28 15:20:00
3	14	2018-04-27 20:25:00

The above figures show that after updating values of the General table, the trigger feeds value into the Log Table.

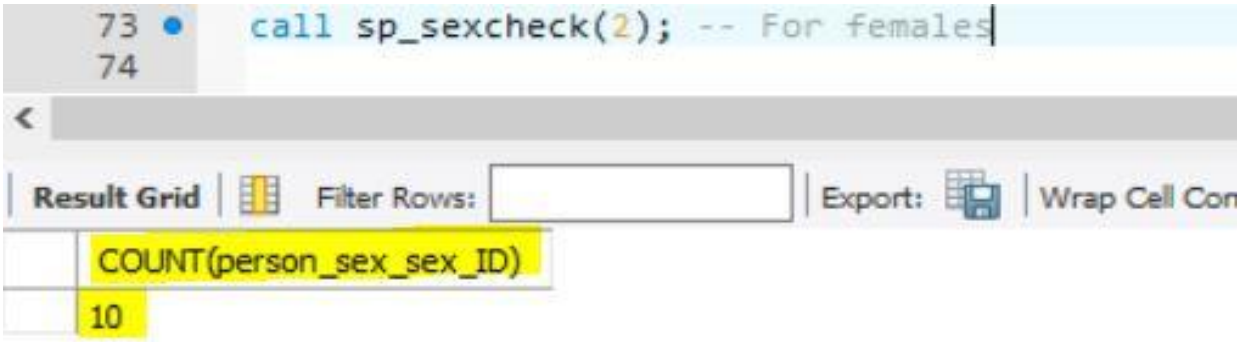
Stored Procedures

Since this database highlights the people, who are the driving participants for the database, it would mostly be used for various analysis purposes. Two examples how the database can be used for analysis purposes,

1) Finding the Male to Female Sex Count

```
-- ---------------------------------------------------------------------
-- Procedure to count males and females using functions
-- ---------------------------------------------------------------------
DROP PROCEDURE IF EXISTS sp_sexcheck;
DELIMITER $$
CREATE PROCEDURE sp_sexcheck(SexID int)
BEGIN
SELECT COUNT(person_sex_sex_ID) FROM person where person_sex_sex_ID=SexID;
END$$
DELIMITER ;

call sp_sexcheck(2); -- For females
```

The result obtained is as follows,

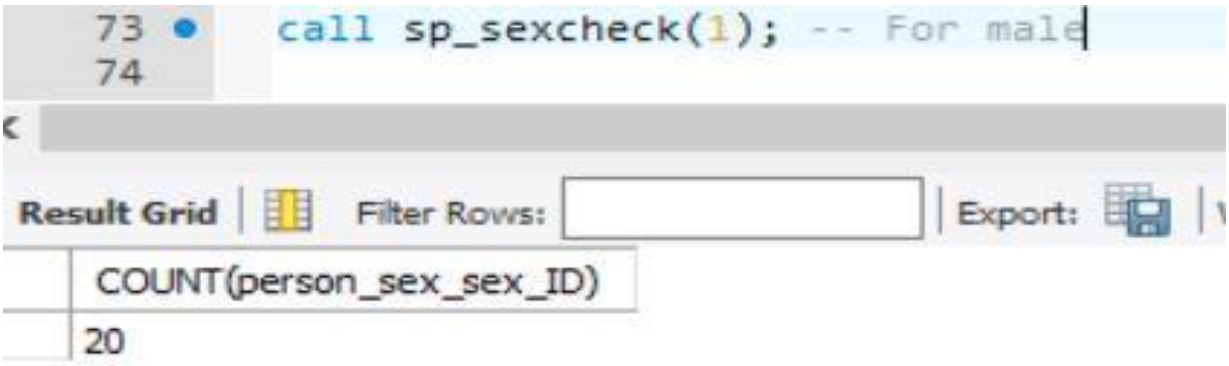


The query asks the database to create a procedure to count the number of people who're of the SexID of "2". "2" is the sex ID for Females in the database, hence, the query returns the count as **10**

2) What about the Handsome Men?

```
-- ---------------------------------------------------------------------
-- Procedure to count males and females using functions
-- ---------------------------------------------------------------------
DROP PROCEDURE IF EXISTS sp_sexcheck;
DELIMITER $$
CREATE PROCEDURE sp_sexcheck(SexID int)
BEGIN
SELECT COUNT(person_sex_sex_ID) FROM person where person_sex_sex_ID=SexID;
END$$
DELIMITER ;

call sp_sexcheck(1); -- For male
```

The above gives the result,



The query asks the database to create a procedure to count the number of people who're of the SexID of "1". "1" is the sex ID for Males in the database, hence, the query returns the count as **20.**

Stored procedures are also being used for pacey inserts as altering the table and adding values as a standalone would be an extremely time-consuming task, especially with tables having more than 15 columns and rows above 100.

The problem above mentioned is toned down and the following tis performed,

```
-- -----------------------------------------
-- Stored Procedure
-- -----------------------------------------
DELIMITER $$

create procedure Insert_person( P_FirstName varchar(45), P_MiddleName varchar(45), P_LastName varchar(45), Address_ID int(11), NUID char(9),
person_sex_sex_ID int(11), PersonType_Id int(11))
begin
insert into person values(Null, P_FirstName, P_MiddleName, P_LastName, Address_ID, NUID, person_sex_sex_ID, PersonType_ID);
END$$

DELIMITER ;
```

Before the procedure was called, the person table was as follows,

```
57 •  Select * from person;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

PersonID	P_FirstName	P_MiddleName	P_LastName	Address_ID	NUID	person_sex_Sex_ID	PersonType_Id
21	Chandler	NULL	Blino	8	001478585	1	1
22	Jennifer	NULL	Anniston	7	001851647	2	1
23	Ross	NULL	Geller	9	002245555	1	1
24	Monica	NULL	Geller	9	001854744	2	1
25	Joev	NULL	Tribianni	10	001582222	1	1
26	Janice	NULL	Manice	1	001854745	2	1
27	Cristiano	Dos Santos	Aviero	2	001854578	1	1
28	Mo	NULL	Salah	9	005458885	1	1
29	Fernando	Torres	Spain	4	002154854	1	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

As we can see, the last `PersonID` row is 29, now let's call the procedure for 30.

We get,

```
60 •  call Insert_person ('Virat', Null, 'Kohli', 1, '002157754', 1, 1);
61
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

PersonID	P_FirstName	P_MiddleName	P_LastName	Address_ID	NUID	person_sex_Sex_ID	PersonType_Id
22	Jennifer	NULL	Anniston	7	001851647	2	1
23	Ross	NULL	Geller	9	002245555	1	1
24	Monica	NULL	Geller	9	001854744	2	1
25	Joev	NULL	Tribianni	10	001582222	1	1
26	Janice	NULL	Manice	1	001854745	2	1
27	Cristiano	Dos Santos	Aviero	2	001854578	1	1
28	Mo	NULL	Salah	9	005458885	1	1
29	Fernando	Torres	Spain	4	002154854	1	1
30	Virat	NULL	Kohli	1	002157754	1	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The call**, Insert_person** invoked the procedure with the values the user presents and inserts the data.

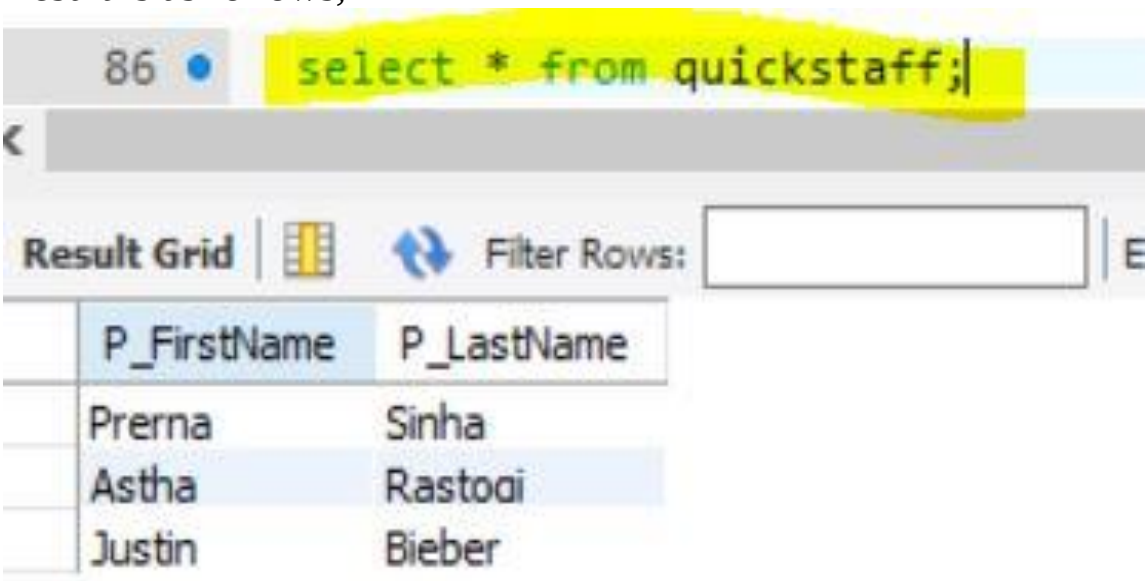
Views

Views are created for quick table viewing and decision-making processes. This allows the query writer to give an overview of the required “data” from the database.

Views are created for visualization purposes, view used in this database is as follows,

```
-- ---------------------------------------------------------
-- Create View which includes join for visualization
-- ---------------------------------------------------------

Create view quickstaff as
select P_FirstName, P_LastName from gym_staff gs
inner join person p on gs.PersonID = p.PersonID
inner join staff_shifts ss on gs.Staff_ID = ss.Staff_ID
where ss.ShiftID in (1,2,3);
```

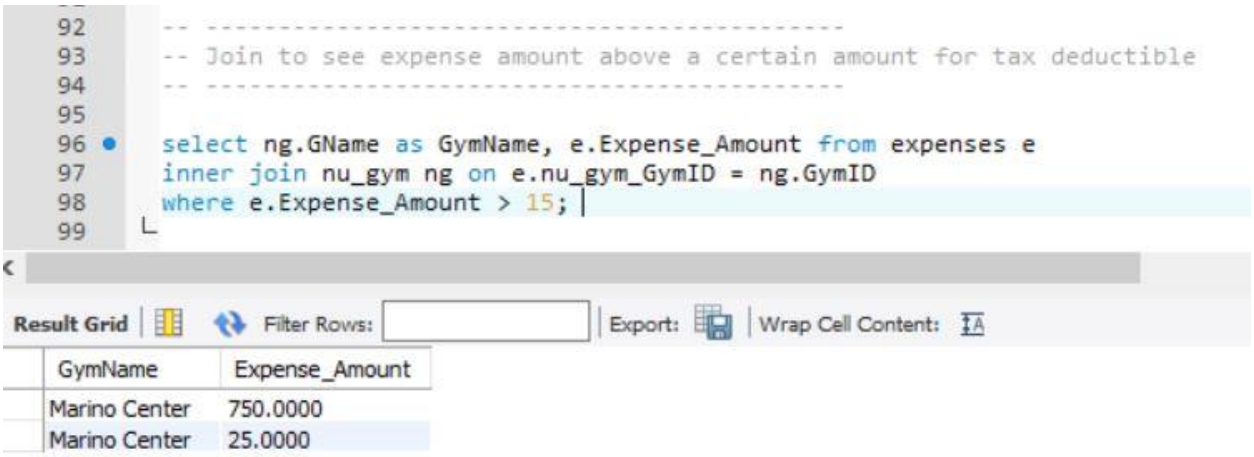
Result is as follows,



The result shows First and Last Name of the staff that come under the ShiftID 1,2 and 3, for allocation purposes by the supervisor.

Joins

Joins are being used here to combine the data of gym name and the expenses. Prime motive, being able to find what can be used as tax deductibles as Northeastern University is a not for profit organization.



```
92  -- ------------------------------------------
93  -- Join to see expense amount above a certain amount for tax deductible
94  -- ------------------------------------------
95
96  select ng.GName as GymName, e.Expense_Amount from expenses e
97  inner join nu_gym ng on e.nu_gym_GymID = ng.GymID
98  where e.Expense_Amount > 15;
99
```

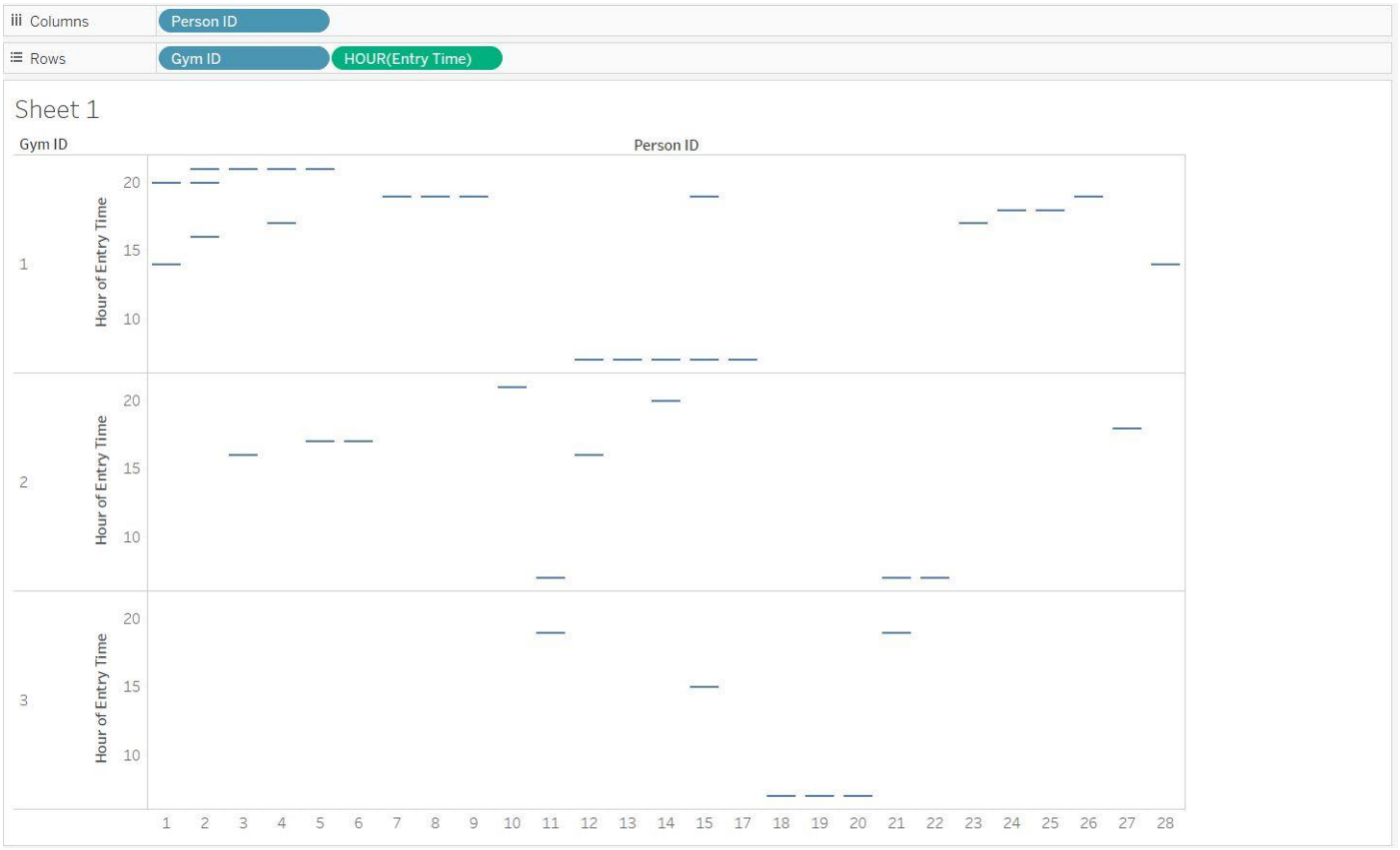
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

GymName	Expense_Amount
Marino Center	750.0000
Marino Center	25.0000

The result shows the gym names and expense amount greater than $15.

Conclusion

This course has empowered me with the fundamentals of database design emphasizing on Normalization and other design techniques. This database serves as a tool/platform to view the data and to visualize the data in order to meet the business needs or requirements. One of the visualization analysis that can be made is as follows,



The figure above shows how many people have entered which gym, at what particular time and the date of entry, hence giving the overall traffic view for further analysis i.e. Regression or predictive analysis.

APPENDIX

SQL CODE:

```
CREATE DATABASE  IF NOT EXISTS `try1` /*!40100 DEFAULT CHARACTER SET latin1
*/;
USE `try1`;
-- MySQL dump 10.13  Distrib 5.7.17, for Win64 (x86_64)
--
-- Host: 127.0.0.1    Database: try1
-- ------------------------------------------------------
-- Server version        5.6.39

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS
*/;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0
*/;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS,
FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;

--
-- Temporary view structure for view `backupstaff`
--

DROP TABLE IF EXISTS `backupstaff`;
/*!50001 DROP VIEW IF EXISTS `backupstaff`*/;
SET @saved_cs_client     = @@character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `backupstaff` AS SELECT
 1 AS `P_FirstName`,
 1 AS `P_LastName`*/;
SET character_set_client = @saved_cs_client;

--
-- Table structure for table `equipment_type`
--
```

```
DROP TABLE IF EXISTS `equipment_type`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `equipment_type` (
  `Eq_TypeID` int(11) NOT NULL AUTO_INCREMENT,
  `Eq_Name` varchar(45) DEFAULT NULL,
  PRIMARY KEY (`Eq_TypeID`)
) ENGINE=InnoDB AUTO_INCREMENT=10 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `equipment_type`
--

LOCK TABLES `equipment_type` WRITE;
/*!40000 ALTER TABLE `equipment_type` DISABLE KEYS */;
INSERT INTO `equipment_type` VALUES (1,'Thread Mill'),(2,'Cross Trainer'),(3,'Chest
Press'),(4,'Shoulder Press'),(5,'Step Trainer'),(6,'Leg Press'),(7,'Rowing Machine'),(8,'Lateral
Machine'),(9,'Smith Machine');
/*!40000 ALTER TABLE `equipment_type` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `equipments`
--

DROP TABLE IF EXISTS `equipments`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `equipments` (
  `EquipmentID` int(11) NOT NULL AUTO_INCREMENT,
  `Eq_Code` varchar(35) NOT NULL,
  `Maintenance_Date` date NOT NULL,
  `GymID` int(11) NOT NULL,
  `Eq_TypeID` int(11) DEFAULT NULL,
  PRIMARY KEY (`EquipmentID`,`GymID`),
  KEY `eq_type_idx` (`Eq_TypeID`),
  KEY `equipments to the gym_idx` (`GymID`),
  CONSTRAINT `eq_type` FOREIGN KEY (`Eq_TypeID`) REFERENCES `equipment_type`
(`Eq_TypeID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT `equipments to the gym` FOREIGN KEY (`GymID`) REFERENCES
`nu_gym` (`GymID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=10 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
```

```
--
-- Dumping data for table `equipments`
--

LOCK TABLES `equipments` WRITE;
/*!40000 ALTER TABLE `equipments` DISABLE KEYS */;
INSERT INTO `equipments` VALUES (1,'000025','2018-05-15',1,1),(2,'000026','2018-05-
20',1,1),(3,'100054','2018-06-18',3,3),(4,'102525','2018-06-20',2,5),(5,'000215','2018-06-
21',2,7),(6,'014582','2018-06-22',2,2),(7,'254871','2018-06-22',1,2),(8,'015452','2018-06-
23',3,9),(9,'255254','2018-06-23',1,8);
/*!40000 ALTER TABLE `equipments` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `expenses`
--

DROP TABLE IF EXISTS `expenses`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `expenses` (
  `ExpenseID` int(11) NOT NULL AUTO_INCREMENT,
  `Expense_Name` varchar(50) NOT NULL,
  `Expense_Amount` decimal(13,4) NOT NULL,
  `Expense_Date` date NOT NULL,
  `nu_gym_GymID` int(11) NOT NULL,
  PRIMARY KEY (`ExpenseID`),
  KEY `gym_expenses_idx` (`nu_gym_GymID`),
  CONSTRAINT `gym_expenses` FOREIGN KEY (`nu_gym_GymID`) REFERENCES
`nu_gym` (`GymID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `expenses`
--

LOCK TABLES `expenses` WRITE;
/*!40000 ALTER TABLE `expenses` DISABLE KEYS */;
INSERT INTO `expenses` VALUES (1,'New Cross Trainer',750.0000,'2018-04-15',1),(2,'New
Pair of Dumbells',25.0000,'2018-04-17',1),(3,'Replacement of Washing Machine',10.0000,'2018-
04-23',3);
/*!40000 ALTER TABLE `expenses` ENABLE KEYS */;
UNLOCK TABLES;

--
```

```
-- Table structure for table `general_information`
--

DROP TABLE IF EXISTS `general_information`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `general_information` (
  `GymID` int(11) NOT NULL,
  `PersonID` int(11) NOT NULL,
  `EntryTime` datetime NOT NULL,
  KEY `People who come to the gym and their entry time_idx` (`PersonID`),
  KEY `People coming to the particular gym_idx` (`GymID`),
  CONSTRAINT `People coming to the particular gym` FOREIGN KEY (`GymID`)
REFERENCES `nu_gym` (`GymID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT `People who come to the gym ` FOREIGN KEY (`PersonID`) REFERENCES
`person` (`PersonID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `general_information`
--

LOCK TABLES `general_information` WRITE;
/*!40000 ALTER TABLE `general_information` DISABLE KEYS */;
INSERT INTO `general_information` VALUES (1,1,'2018-04-24 14:25:15'),(1,2,'2018-04-24
16:15:35'),(2,3,'2018-04-24 16:16:00'),(1,4,'2018-04-24 17:05:00'),(2,5,'2018-04-25
17:15:00'),(2,6,'2018-04-26 17:25:15'),(1,7,'2018-04-26 19:00:15'),(1,8,'2018-04-26
19:15:45'),(1,9,'2018-04-26 19:20:15'),(2,10,'2018-04-26 21:05:00'),(2,11,'2018-04-26
07:00:00'),(1,12,'2018-04-26 07:25:00'),(1,14,'2018-04-26 07:26:00'),(1,13,'2018-04-26
07:27:00'),(1,15,'2018-04-26 07:28:00'),(2,22,'2018-04-26 07:29:00'),(2,21,'2018-04-26
07:31:00'),(3,20,'2018-04-26 07:32:00'),(3,19,'2018-04-27 07:00:00'),(3,18,'2018-04-27
07:21:00'),(1,17,'2018-04-27 07:24:00'),(2,14,'2018-04-27 20:25:00'),(1,28,'2018-04-27
14:21:00'),(1,23,'2018-04-27 17:21:00'),(2,27,'2018-04-27 18:21:00'),(1,24,'2018-04-27
18:31:00'),(1,25,'2018-04-27 18:41:00'),(1,26,'2018-04-27 19:22:00'),(2,14,'2018-04-27
20:25:00'),(3,15,'2018-04-28 15:20:00');
/*!40000 ALTER TABLE `general_information` ENABLE KEYS */;
UNLOCK TABLES;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8 */ ;
/*!50003 SET character_set_results = utf8 */ ;
/*!50003 SET collation_connection  = utf8_general_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              = 'NO_ENGINE_SUBSTITUTION' */ ;
```

```
DELIMITER ;;
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER
`try1`.`general_information_AFTER_INSERT` AFTER INSERT ON `general_information`
FOR EACH ROW
BEGIN

Insert into person_log values (Null, new.PersonID, new.EntryTime);
END */;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8 */ ;
/*!50003 SET character_set_results = utf8 */ ;
/*!50003 SET collation_connection  = utf8_general_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              = 'NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER
`try1`.`general_information_AFTER_UPDATE` AFTER UPDATE ON `general_information`
FOR EACH ROW
BEGIN

Insert into person_log values (Default, new.PersonID, new.EntryTime);

END */;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;

--
-- Table structure for table `gym_staff`
--

DROP TABLE IF EXISTS `gym_staff`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `gym_staff` (
  `Staff_ID` int(11) NOT NULL AUTO_INCREMENT,
  `PersonID` int(11) NOT NULL,
```

```
  `nu_gym_GymID` int(11) NOT NULL,
  PRIMARY KEY (`Staff_ID`),
  KEY `Staff working in a particular gym_idx` (`nu_gym_GymID`),
  CONSTRAINT `Staff working in a particular gym` FOREIGN KEY (`nu_gym_GymID`)
REFERENCES `nu_gym` (`GymID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=5 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `gym_staff`
--

LOCK TABLES `gym_staff` WRITE;
/*!40000 ALTER TABLE `gym_staff` DISABLE KEYS */;
INSERT INTO `gym_staff` VALUES (1,8,1),(2,9,1),(3,10,2),(4,11,2);
/*!40000 ALTER TABLE `gym_staff` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `nu_gym`
--

DROP TABLE IF EXISTS `nu_gym`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `nu_gym` (
  `GymID` int(11) NOT NULL AUTO_INCREMENT,
  `GName` varchar(50) NOT NULL,
  `Gym_AddressID` int(11) NOT NULL,
  PRIMARY KEY (`GymID`),
  KEY `Gym Address to gym_idx` (`Gym_AddressID`),
  CONSTRAINT `Gym Address to gym` FOREIGN KEY (`Gym_AddressID`) REFERENCES
`nugym_address` (`nugym_addressID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `nu_gym`
--

LOCK TABLES `nu_gym` WRITE;
/*!40000 ALTER TABLE `nu_gym` DISABLE KEYS */;
INSERT INTO `nu_gym` VALUES (1,'Marino Center',1),(2,'SquahsBusters Badger and Rosen
Center',2),(3,'Cabot Center',3);
/*!40000 ALTER TABLE `nu_gym` ENABLE KEYS */;
UNLOCK TABLES;
```

```
--
-- Table structure for table `nugym_address`
--

DROP TABLE IF EXISTS `nugym_address`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `nugym_address` (
  `nugym_addressID` int(11) NOT NULL AUTO_INCREMENT,
  `Street` varchar(45) DEFAULT NULL,
  `State` varchar(45) DEFAULT NULL,
  `Zip` varchar(45) DEFAULT NULL,
  `Contact` varchar(25) DEFAULT NULL,
  PRIMARY KEY (`nugym_addressID`)
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `nugym_address`
--

LOCK TABLES `nugym_address` WRITE;
/*!40000 ALTER TABLE `nugym_address` DISABLE KEYS */;
INSERT INTO `nugym_address` VALUES (1,'259-269 Huntington
Avenue','Boston','MA','2115'),(2,'795 Columbus Avenue, Roxbury
Crossing','Boston','MA','2120'),(3,'400 Huntington Avenue','Boston','MA','2115');
/*!40000 ALTER TABLE `nugym_address` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `person`
--

DROP TABLE IF EXISTS `person`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `person` (
  `PersonID` int(11) NOT NULL AUTO_INCREMENT,
  `P_FirstName` varchar(45) NOT NULL,
  `P_MiddleName` varchar(45) DEFAULT NULL,
  `P_LastName` varchar(45) NOT NULL,
  `Address_ID` int(11) NOT NULL,
  `NUID` char(9) NOT NULL,
  `person_sex_Sex_ID` int(11) NOT NULL,
  `PersonType_Id` int(11) NOT NULL,
```

```
  PRIMARY KEY (`PersonID`,`person_sex_Sex_ID`),
  KEY `Person's Sex_idx` (`person_sex_Sex_ID`),
  KEY `Person's Type_idx` (`PersonType_Id`),
  KEY `Person's Address_idx` (`Address_ID`),
  CONSTRAINT `Person's Address` FOREIGN KEY (`Address_ID`) REFERENCES
`person_address` (`AddressID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT `Person's Sex` FOREIGN KEY (`person_sex_Sex_ID`) REFERENCES
`person_sex` (`Sex_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT `Person's Type` FOREIGN KEY (`PersonType_Id`) REFERENCES
`person_type` (`PersonType_Id`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=31 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `person`
--

LOCK TABLES `person` WRITE;
/*!40000 ALTER TABLE `person` DISABLE KEYS */;
INSERT INTO `person` VALUES (1,'Gaurav
Raj','NULL','Chattarki',1,'001851611',1,1),(2,'Jaini','Teaching','Assistant',1,'001851411',2,2),(3,'A
darsh','NULL','Ravi',2,'001851512',1,1),(4,'Varsha ','Teaching
','Assistant',5,'001851475',2,1),(5,'Sonia','Boss','Ahmed',3,'001475865',2,1),(6,'Yusuf
','NULL','Ozbek',5,'015495952',1,2),(7,'DJ
pK','Silence','D\'Souza',4,'018547777',1,1),(8,'Sanchay','NULL','Bhambri',2,'001884269',1,2),(9,'
Prerna','NULL','Sinha',2,'001874552',2,2),(10,'Astha','NULL','Rastogi',1,'047474712',2,2),(11,'Ju
stin
','NULL','Bieber',5,'024578221',1,2),(12,'Bhavika',NULL,'Bhagariya',3,'002158522',2,1),(13,'Ani
k',NULL,'Bhattacharya',5,'001545922',1,2),(14,'Keerthan','Kiran','Bharadwaj',4,'002158522',1,2),
(15,'Karthik',NULL,'Keshava',5,'212626292',1,2),(16,'Krishnaswaroop',NULL,'Bykadi',6,'21548
2582',1,1),(17,'Anusha',NULL,'Rameshbabu',1,'001854651',1,2),(18,'Pallav',NULL,'Choudry',2,'
01851625',2,2),(19,'Vishak','R','Cat',7,'001851614',1,1),(20,'Beline','Quet','Forex',8,'001851648',1
,1),(21,'Chandler',NULL,'Bling',8,'001478585',1,1),(22,'Jennifer',NULL,'Anniston',7,'001851647'
,2,1),(23,'Ross',NULL,'Geller',9,'002245555',1,1),(24,'Monica',NULL,'Geller',9,'001854744',2,1),
(25,'Joey',NULL,'Tribianni',10,'001582222',1,1),(26,'Janice',NULL,'Manice',1,'001854745',2,1),(
27,'Cristiano','Dos
Santos','Aviero',2,'001854578',1,1),(28,'Mo',NULL,'Salah',9,'005458885',1,1),(29,'Fernando','Tor
res','Spain',4,'002154854',1,1),(30,'Virat',NULL,'Kohli',1,'002157754',1,1);
/*!40000 ALTER TABLE `person` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `person_address`
--

DROP TABLE IF EXISTS `person_address`;
```

```
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `person_address` (
  `AddressID` int(11) NOT NULL AUTO_INCREMENT,
  `Street` varchar(45) NOT NULL,
  `City` varchar(45) NOT NULL,
  `State` varchar(32) NOT NULL,
  `Zip` varchar(45) NOT NULL,
  PRIMARY KEY (`AddressID`)
) ENGINE=InnoDB AUTO_INCREMENT=11 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `person_address`
--

LOCK TABLES `person_address` WRITE;
/*!40000 ALTER TABLE `person_address` DISABLE KEYS */;
INSERT INTO `person_address` VALUES (1,'775 tremont Street ','Boston','MA','2118'),(2,'461
Huntington Ave','Boston','MA','2150'),(3,'170 Parker Hill Avenue','Boston','MA','2167'),(4,'471
Hutington Ave','Boston','MA','2185'),(5,'123 Burlington Ave','Boston','MA','2001'),(6,'108
Seaport District','Boston','MA','2014'),(7,'777 Tremont Street','Las Vegas','CA','89137-
547'),(8,'481 Mission Hill','Boston','MA','2154'),(9,'482 Mission
Hill','Boston','MA','215'),(10,'4185 Boylston Street','Boston','MA','2144');
/*!40000 ALTER TABLE `person_address` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `person_log`
--

DROP TABLE IF EXISTS `person_log`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `person_log` (
  `LogID` int(11) NOT NULL AUTO_INCREMENT,
  `PersonID` int(11) NOT NULL,
  `EntryTime` datetime NOT NULL,
  PRIMARY KEY (`LogID`)
) ENGINE=InnoDB AUTO_INCREMENT=5 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `person_log`
--
```

```
LOCK TABLES `person_log` WRITE;
/*!40000 ALTER TABLE `person_log` DISABLE KEYS */;
INSERT INTO `person_log` VALUES (1,16,'2018-04-27 19:25:00'),(2,15,'2018-04-28
15:20:00'),(3,14,'2018-04-27 20:25:00'),(4,14,'2018-04-27 20:25:00');
/*!40000 ALTER TABLE `person_log` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `person_sex`
--

DROP TABLE IF EXISTS `person_sex`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `person_sex` (
  `Sex_ID` int(11) NOT NULL,
  `Sex` varchar(10) NOT NULL,
  PRIMARY KEY (`Sex_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `person_sex`
--

LOCK TABLES `person_sex` WRITE;
/*!40000 ALTER TABLE `person_sex` DISABLE KEYS */;
INSERT INTO `person_sex` VALUES (1,'M'),(2,'F'),(3,'Other');
/*!40000 ALTER TABLE `person_sex` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `person_type`
--

DROP TABLE IF EXISTS `person_type`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `person_type` (
  `PersonType_Id` int(11) NOT NULL AUTO_INCREMENT,
  `Person_Type` varchar(10) NOT NULL,
  PRIMARY KEY (`PersonType_Id`)
) ENGINE=InnoDB AUTO_INCREMENT=29 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
```

```
-- Dumping data for table `person_type`
--

LOCK TABLES `person_type` WRITE;
/*!40000 ALTER TABLE `person_type` DISABLE KEYS */;
INSERT INTO `person_type` VALUES (1,'Student'),(2,'Staff');
/*!40000 ALTER TABLE `person_type` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Temporary view structure for view `quickstaff`
--

DROP TABLE IF EXISTS `quickstaff`;
/*!50001 DROP VIEW IF EXISTS `quickstaff`*/;
SET @saved_cs_client     = @@character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `quickstaff` AS SELECT
 1 AS `P_FirstName`,
 1 AS `P_LastName`*/;
SET character_set_client = @saved_cs_client;

--
-- Table structure for table `shifts`
--

DROP TABLE IF EXISTS `shifts`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `shifts` (
  `ShiftID` int(11) NOT NULL AUTO_INCREMENT,
  `ShiftSlot` varchar(14) NOT NULL,
  `Slot_Timing` varchar(25) NOT NULL,
  PRIMARY KEY (`ShiftID`)
) ENGINE=InnoDB AUTO_INCREMENT=5 DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `shifts`
--

LOCK TABLES `shifts` WRITE;
/*!40000 ALTER TABLE `shifts` DISABLE KEYS */;
INSERT INTO `shifts` VALUES (1,'1','19:30:00 to 01:00:00'),(2,'2','19:30:00 to
01:00:00'),(3,'3','21:00:00 to 01:00:00'),(4,'4','07:30:00 to 13:00:00');
/*!40000 ALTER TABLE `shifts` ENABLE KEYS */;
```

```
UNLOCK TABLES;

--
-- Table structure for table `staff_shifts`
--

DROP TABLE IF EXISTS `staff_shifts`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `staff_shifts` (
  `Date` date NOT NULL,
  `Staff_ID` int(11) NOT NULL,
  `ShiftID` int(11) NOT NULL,
  PRIMARY KEY (`Date`,`Staff_ID`,`ShiftID`),
  KEY `Staff's shift information_idx` (`Staff_ID`),
  KEY `Each shift for the staff_idx` (`ShiftID`),
  CONSTRAINT `Each shift for the staff` FOREIGN KEY (`ShiftID`) REFERENCES `shifts`
(`ShiftID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT `Staff's shift information` FOREIGN KEY (`Staff_ID`) REFERENCES
`gym_staff` (`Staff_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `staff_shifts`
--

LOCK TABLES `staff_shifts` WRITE;
/*!40000 ALTER TABLE `staff_shifts` DISABLE KEYS */;
INSERT INTO `staff_shifts` VALUES ('2018-04-25',1,4),('2018-04-25',2,2),('2018-04-
26',3,1),('2018-04-26',4,3);
/*!40000 ALTER TABLE `staff_shifts` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Dumping events for database 'try1'
--

--
-- Dumping routines for database 'try1'
--
/*!50003 DROP PROCEDURE IF EXISTS `Insert_person` */;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8 */ ;
```

```
/*!50003 SET character_set_results = utf8 */ ;
/*!50003 SET collation_connection  = utf8_general_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              = 'NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `Insert_person`( P_FirstName
varchar(45), P_MiddleName varchar(45), P_LastName varchar(45), Address_ID int(11), NUID
char(9),
person_sex_sex_ID int(11), PersonType_Id int(11))
begin
insert into person values(Null, P_FirstName, P_MiddleName, P_LastName, Address_ID, NUID,
person_sex_sex_ID, PersonType_ID);
END ;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;
/*!50003 DROP PROCEDURE IF EXISTS `sp_sexcheck` */;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8 */ ;
/*!50003 SET character_set_results = utf8 */ ;
/*!50003 SET collation_connection  = utf8_general_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              = 'NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `sp_sexcheck`(SexID int)
BEGIN
SELECT COUNT(person_sex_sex_ID) FROM person where person_sex_sex_ID=SexID;
END ;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;

--
-- Final view structure for view `backupstaff`
--

/*!50001 DROP VIEW IF EXISTS `backupstaff`*/;
/*!50001 SET @saved_cs_client          = @@character_set_client */;
/*!50001 SET @saved_cs_results         = @@character_set_results */;
/*!50001 SET @saved_col_connection     = @@collation_connection */;
```

```
/*!50001 SET character_set_client      = utf8 */;
/*!50001 SET character_set_results     = utf8 */;
/*!50001 SET collation_connection      = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `backupstaff` AS select `p`.`P_FirstName` AS `P_FirstName`,`p`.`P_LastName`
AS `P_LastName` from ((`gym_staff` `gs` join `person` `p` on((`gs`.`PersonID` =
`p`.`PersonID`))) join `staff_shifts` `ss` on((`gs`.`Staff_ID` = `ss`.`Staff_ID`))) where
(`ss`.`ShiftID` in (1,2)) */;
/*!50001 SET character_set_client      = @saved_cs_client */;
/*!50001 SET character_set_results     = @saved_cs_results */;
/*!50001 SET collation_connection      = @saved_col_connection */;

--
-- Final view structure for view `quickstaff`
--

/*!50001 DROP VIEW IF EXISTS `quickstaff`*/;
/*!50001 SET @saved_cs_client          = @@character_set_client */;
/*!50001 SET @saved_cs_results         = @@character_set_results */;
/*!50001 SET @saved_col_connection     = @@collation_connection */;
/*!50001 SET character_set_client      = utf8 */;
/*!50001 SET character_set_results     = utf8 */;
/*!50001 SET collation_connection      = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `quickstaff` AS select `p`.`P_FirstName` AS `P_FirstName`,`p`.`P_LastName`
AS `P_LastName` from ((`gym_staff` `gs` join `person` `p` on((`gs`.`PersonID` =
`p`.`PersonID`))) join `staff_shifts` `ss` on((`gs`.`Staff_ID` = `ss`.`Staff_ID`))) where
(`ss`.`ShiftID` in (1,2,3)) */;
/*!50001 SET character_set_client      = @saved_cs_client */;
/*!50001 SET character_set_results     = @saved_cs_results */;
/*!50001 SET collation_connection      = @saved_col_connection */;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;

-- Dump completed on 2018-04-26  6:37:12
```