

# HAMARAY BACHAY

**Database Systems Project** 



MUHAMMAD MOIZ SAJID 19I-0692 SECTION C

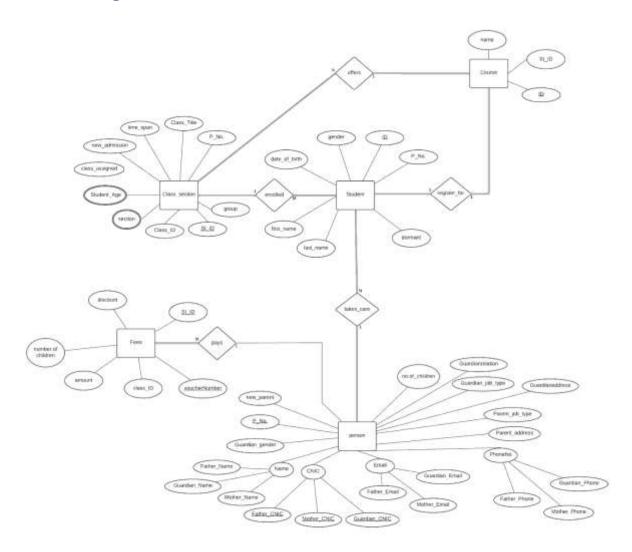
TAHA RIZWAN 19I-0681 SECTION B

WAHAJ RAHMAN 19I-0473 SECTION A

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## ER/EER Diagram



# Relational Schema



### Description of all tables

- 1. Student: Stores the student data that includes the name, gender and date of birth, this table links with the 'person' and 'class\_section' tables to store further values.
- 2. Class\_section: This table stores the data for the class grade and the sections of each class, for each student. This table also stores the time span, the group (male or female section), 'class assigned' that tells whether the student had a recent change in their class and the new admission attribute that tells the status of the admission of the student.
- 3. Course: This class stores the course IDs and names for each student that takes those courses.
- 4. Person: Stores the parent/guardian info of each student. It gives the number of children for each parent/guardian. For the guardian it also tells the relation type. This table is linked with student and the class\_section table.
- 5. Fees: This table holds the information about the student's fee with respect to their grade. This table also checks whether the student is given a discount based of, of need basis or if they have siblings exceeding a total of 3 students for their parents.
- 6. Section: This table holds the information about the sections each grade will have. For this purpose, it has a section column for each class ID.

#### **Datasets**

```
-- Dumping data for table `Student`
Student` (`St_ID`,
first_name`,`last_name`,`St_gender`,`date_of_birth`,`P_no`,`dormant`) VALUES
('01','Syed','Kashif','Male','2007-03-23','1','<sup>1</sup>'),
('02','Atif','Munir','Male','2009-05-13','2','2'),
('03', 'Fatima', 'Munir', 'Female', '2010-07-04', '2', '3'),
('04', 'Mahnoor', 'latif', 'Female', '2011-09-15', '4', '2'),
('05', 'Khurram', 'latif', 'Male', '2017-01-17', '4', '1'),
('06','Ali','Abbas','Male','2012-02-20','6','1'),
('07', 'Ayesha', 'Baig', 'Female', '2013-04-25', '7', '1'),
('08','Zainab','Azeem','Female','2014-07-29','8','2'),
('09','Hammad','Azeem','Male','2015-08-30','8','4'),
('10', 'Javaria', 'Tahir', 'Female', '2016-12-16', '10', '3');
-- Dumping data for table `Course`
Course` (`Course_ID`, `Course_name`, `St_ID`) VALUES
('C01','English','03'),
('C02', 'Urdu', '01'),
('C02', 'Urdu', '04'),
('C03', 'Science', '05'),
('C04','Computer','07'),
('C05','History','06'),
 'C06', 'Arts', '02'),
```

```
('C06', 'Arts', '10'),
('C07','Visual Arts','09'),
('C07','Visual Arts','08');
-- Dumping data for table `Class_section`
`Class_section` (`Class_ID`,`P_no`, `Class_title`,`group`,`St_ID`,
`time_span`,`new_admission`,`class_assigned`) VALUES
('CS01','2','Class of English','F','03','10-5-2019','old','new'),
('CS02','1','Class of Urdu','M','01','10-5-2019','old','old'),
('CS02','3','Class of Urdu','F','04','10-5-2019','old','new'),
('CS03','4','Class of Science','M','05','14-5-2021','old','new'),
('CS04','7','Class of Computer','F','07','16-5-2021','old','old'),
('CS05','6','Class of History','M','06','20-5-2020','old','new'),
('CS06','2','Class of Arts','M','02','10-7-2019','old','old'),
('CS06','10','Class of Arts','F','10','14-8-2021','new','old'),
('CS07','0','Class of Visual Arts','M','09','14-8-2021','new','old'),
('CS07','8','Class of Visual Arts','F','08','14-8-2021','new','new');
-- Dumping data for table `Student_Age`
`Student_Age` (`St_ID`, `St_Age`,`Class_ID`) VALUES
('01','14','CS02'),
('02','12','CS06'),
('03','11','CS01'),
('04','10','CS02'),
('05','04','CS03'),
('06','09','CS05'),
('07','08','CS04'),
('08','07','CS07'),
('09','06','CS07'),
('10','05','CS06');
-- Dumping data for table `Section`
('CS01','S01','A'),
('CS02','S02','A'),
('CS02','S03','B'),
('CS03','S04','A'),
('CS04','S05','A'),
('CS05','S06','A'),
('CS06','S07','A'),
```

```
('CS06','S08','B'),
('CS07','S09','A'),
('CS07','S10','B');
-- Dumping data for table `Person`
 Person`
(`P_no`,`Number_of_Children`,`Father_Name`,`Mother_Name`,`Father_CNIC`,`Mother
_CNIC`,`Parent_address`,`Father_PhoneNo`,`Mother_PhoneNo`,`Father_Email`,`Moth
er_Email`,`Parent_jobtype`,`Guardian_Name`,`Guardian_CNIC`,`Guardian_address`,
`Guardian_PhoneNo`,`Guardian_Email`,`Guardian_Relation`,`new_parent`) VALUES
('1','1','Kashif Hamza','Hamda Syed','61101-4376543-1','61101-9234200-2','H.01
St.01 G-10/1 Islamabad','0308-5934123','0308-
5234671', 'Kashif.Hamza@gmail.com', 'Hamda.Syed@gmail.com', 'Employee At AAJ
News','Wahaj','61101-6182395-7','Wah Cantt','0315-
5168892', 'wahajrahman@gmail.com', 'Uncle', 'old'),
('2','2','Munir Asim','Fatima Munir','61101-5271233-3','61101-8234652-4','H.11
St.11 G-10/2 Islamabad', '0304-4834321', '0304-
5234671', 'Munir.Asim@gmail.com', 'Fatima.Munir@gmail.com', 'Employee At
PakWheels','Mishal','51100-7612942-1','B-17 Islamabad','0321-
7283965', 'mishal@yahoo.com', 'Aunt', 'old'),
('3','3','Umar Altaf','Ayesha Akram','61101-2173453-5','61101-7234908-6','H.21
St.12 G-10/3 Islamabad','0302-9734356','0302-
5234671', 'Umar.Altaf@gmail.com', 'Ayesha.Akram@gmail.com', 'Employee At AAJ
News','Ali','31100-7284912-4','Gulberg-3','0314-
7283924', 'Ali230@hotmail.com', 'Family Friend', 'old'),
('4','2','Latif Khan','Zainab Khan','61101-4074373-7','61101-6234699-8','H.31
St.19 G-10/4 Islamabad','0336-3834098','0336-
5234671', 'Latif.khatak@gmail.com', 'Zainab.tiktok@gmail.com', 'Youtuber', 'Qurat-
ul-Ain','51100-3456789-2','G-13','0312-
7839123', 'ainny555@gmail.com', 'Aunt', 'old'),
('5','2','Ehsan Khan','Rasheeda Khan','61101-3979873-9','61101-5234224-
2', 'H.41 St.20 F-10/1 Islamabad', '0304-7534032', '0304-
5234671', 'Ehsan.Khan@gmail.com', 'Rasheeda123@gmail.com', 'Producer At
VOA', 'Sara', '72900-8129412-8', 'G-10', '0312-8889123', 'sara@hotmail.com', 'Family
friend','old'),
('6','1','Abbas Amjad','Mahnoor Jeelani','61101-2872233-1','61101-4234229-
4','H.51 St.32 F-10/2 Islamabad','0312-8434078','0312-
5234671', 'Abbas.amjad@gmail.com', 'Mahnoor003@gmail.com', 'High Court
Judge', 'Zia', '87261-2837194-0', 'G-12', '0300-
1414714', 'ziahakeem@gmail.com', 'father in law', 'old'),
('7','4','Mirza Abdul Baig','Fajr Baig','61101-1777763-3','61101-3234231-
6', 'H.61 St.17 F-10/3 Islamabad', '0301-1334908', '0301-
5234671', 'Mirza.Baig@gmail.com', 'Fajr123@gmail.com', 'Unemployed', 'Aman', '56000
-6127481-2', 'Naval Ankrage', '0312-6273842', 'amanshah@yahoo.com', 'First
Cousine', 'old'),
```

```
('8','3','Azeem Hasan','Maria Abbas','61101-5671223-5','61101-5234666-8','H.71
St.18 F-10/4 Islamabad', '0309-4234254', '0309-
5234671', 'Azeem.hasan@gmail.com', 'Maria.abbas@gmail.com', 'Employee At
FAST(NUCES)','Moiz','51100-3105618-4','G-13','0312-
8681969', 'moiz@gmail.com', 'First Cousine', 'new'),
('9','2','Umar ibn Khalid','Khateja Khan','61101-6576543-7','61101-4234997-
2', 'H.81 St.23 E-11/1 Islamabad', '0320-5134987', '0320-
5234671', 'umar.khalid@gmail.com', 'itsKhateja@gmail.com', 'Staff member of
Hamaray Bachey','Taha','51100-2783923-2','G-10','0312-
4673829', 'taha@hotmail.com', 'Uncle', 'new'),
('10','3','Tahir Abbas','Bisma Batool','61101-7474323-9','61101-3234999-
4','H.91 St.21 G-11/2 Islamabad','0308-6034009','0308-
5234671', 'tahir.amaze@gmail.com', 'bisma.abbas@gmail.com', 'Employee At GEO
News', 'Maryam', '61100-2345678-0', 'E-11', '0331-
1234123', 'Maryam@yahoo.com', 'sister in law', 'new');
-- Dumping data for table `Fees`
Fees`(`St_ID`,`Class_ID`,
`voucherNumber`,`amount`,`discount`,`numberofchildren`) VALUES
('St01', 'CS02', '123056783', '10000', '0', '1'),
('St02','CS06','223156780','10000','0','2'),
('St03','CS01','323256781','10000','30','3'),
('St04','CS02','423356783','10000','0','2'),
('St05','CS03','523456784','10000','0','2'),
 'St06','CS05','623556785','10000','0','1'),
('St07','CS04','723656786','10000','50','4'),
('St08','CS07','823756787','10000','30','3'),
('St09', 'CS07', '923856788', '10000', '100', '2'),
('St10','CS06','023956789','10000','0','3');
```

### SQL statements used to create tables.

```
-- phpMyAdmin SQL Dump
-- version 5.0.2
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1:3306
-- Generation Time: Sep 28, 2021 at 04:31 AM
-- Server version: 5.7.31
-- PHP Version: 7.3.21

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";
```

```
/*!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 utf8mb4 */;
DROP TABLE IF EXISTS `Student`;
CREATE TABLE IF NOT EXISTS `Student` (
  `St ID` INTEGER UNSIGNED AUTO INCREMENT NOT NULL COMMENT 'TRIAL',
  `first_name` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
 `last_name` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `St gender` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `date_of_birth` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
 `P no` INTEGER NOT NULL COMMENT 'TRIAL',
 `dormant` INTEGER NOT NULL,
  PRIMARY KEY (`St_ID`),
  FOREIGN KEY (`P_no`) REFERENCES `person`
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
-- Table structure for table `Course`
DROP TABLE IF EXISTS `Course`;
CREATE TABLE IF NOT EXISTS `Course` (
  `Course ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Course_name` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `St_ID` INTEGER UNSIGNED AUTO_INCREMENT NOT NULL COMMENT 'TRIAL',
 KEY `jhist_Course_ix` (`Course_ID`),
 FOREIGN KEY (`St_ID`) REFERENCES `Student`
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
DROP TABLE IF EXISTS `Class section`;
CREATE TABLE IF NOT EXISTS `Class_section` (
  `Class_ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `P_no` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Class title` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `group` varchar (100) NOT NULL COMMENT 'TRIAL',
 `St_ID` INTEGER UNSIGNED AUTO_INCREMENT NOT NULL COMMENT 'TRIAL',
  `time span` varchar(100) NOT NULL COMMENT 'Admission time',
 `new_admission` varchar(100) NOT NULL COMMENT 'Check',
 class_assigned` varchar(100) NOT NULL COMMENT 'Check',
 KEY `jhist_class_ix` (`Class_ID`),
 FOREIGN KEY('St ID') REFERENCES 'Student',
  FOREIGN KEY(`P no`) REFERENCES `Person`
```

```
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
-- Table structure for table `Student_Age`
DROP TABLE IF EXISTS `Student_Age`;
CREATE TABLE IF NOT EXISTS `Student_Age` (
  `St_ID` INTEGER UNSIGNED AUTO_INCREMENT NOT NULL COMMENT 'TRIAL',
  `St Age` INTEGER DEFAULT NULL COMMENT 'TRIAL',
  `Class_ID` varchar (100) NOT NULL COMMENT 'TRIAL',
 PRIMARY KEY (`St_ID`),
 KEY `jhist_class_ix` (`Class_ID`),
 FOREIGN KEY(`St_ID`) REFERENCES `Student`,
 FOREIGN KEY(`Class_ID`) REFERENCES `Class_section`
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
-- Table structure for table `Section`
DROP TABLE IF EXISTS `Section`;
CREATE TABLE IF NOT EXISTS `Section` (
  `Class_ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Section_ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Section_Name` varchar (100) DEFAULT NULL COMMENT 'TRIAL',
  PRIMARY KEY(`Section_ID`),
  KEY `jhist_class_ix` (`Class_ID`),
  FOREIGN KEY (`Class_ID`) REFERENCES `Class_section`
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
-- Table structure for table `Person`
DROP TABLE IF EXISTS `Person`;
CREATE TABLE IF NOT EXISTS `Person` (
 `P_no` INTEGER NOT NULL COMMENT 'TRIAL',
```

```
Number of Children` INTEGER NOT NULL COMMENT 'TRIAL',
  `Father_Name` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Mother Name` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Father_CNIC` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Mother CNIC` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Parent_address` varchar(200) NOT NULL COMMENT 'TRIAL',
  `Father_PhoneNo` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Mother_PhoneNo` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Father_Email` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Mother_Email` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Parent_jobtype` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Guardian_Name` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `Guardian_CNIC` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `Guardian_address` varchar(200) DEFAULT NULL COMMENT 'TRIAL',
  `Guardian PhoneNo` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `Guardian Email` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `Guardian_Relation` varchar(100) DEFAULT NULL COMMENT 'TRIAL',
  `new_parent` varchar(100) NOT NULL,
   PRIMARY KEY(`P_no`,`Father_CNIC`,`Mother_CNIC`),
  UNIQUE(`Mother_Email`, `Guardian_Email`)
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
-- Table structure for table `Fees`
DROP TABLE IF EXISTS `Fees`;
CREATE TABLE IF NOT EXISTS `Fees` (
  `St ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `Class_ID` varchar(100) NOT NULL COMMENT 'TRIAL',
  `voucherNumber` varchar(100) NOT NULL COMMENT 'TRIAL',
  `amount` double (8,0) DEFAULT NULL COMMENT 'TRIAL',
  `discount` INTEGER DEFAULT NULL COMMENT 'TRIAL',
  `numberofchildren` INTEGER NOT NULL COMMENT 'TRIAL',
  PRIMARY KEY(`St_ID`,`voucherNumber`),
  FOREIGN KEY (`Class_ID`) REFERENCES `Class_section`,
  FOREIGN KEY (`numberofchildren`) REFERENCES `Person`
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COMMENT='TRIAL';
```

SQL statements used to populate tables (insert statements).

```
--
-- Dumping data for table `Student`
--
```

```
INSERT INTO `Student` (`St ID`,
('01','Syed','Kashif','Male','2007-03-23','1','1'),
('02','Atif','Munir', 'Male','2009-05-13','2','2'),
('03', 'Fatima', 'Munir', 'Female', '2010-07-04', '2', '3'),
('04', 'Mahnoor', 'latif', 'Female', '2011-09-15', '4', '2'),
('05', 'Khurram', 'latif', 'Male', '2017-01-17', '4', '1'),
('06','Ali','Abbas','Male','2012-02-20','6','1'),
('07', 'Ayesha', 'Baig', 'Female', '2013-04-25', '7', '1'),
('08', 'Zainab', 'Azeem', 'Female', '2014-07-29', '8', '2'),
('09', 'Hammad', 'Azeem', 'Male', '2015-08-30', '8', '4'),
('10','Javaria','Tahir','Female','2016-12-16','10','3');
-- Dumping data for table `Course`
INSERT INTO `Course` (`Course_ID`, `Course_name`, `St_ID`) VALUES
('C01', 'English', '03'),
('C02','Urdu','01'),
('C02','Urdu','04'),
('C03', 'Science', '05'),
('C04','Computer','07'),
('C05','History','06'),
('C06', 'Arts', '02'),
('C06', 'Arts', '10'),
('C07','Visual Arts','09'),
('C07','Visual Arts','08');
-- Dumping data for table `Class section`
INSERT INTO `Class_section` (`Class_ID`, `P_no`, `Class_title`, `group`, `St_ID`,
time_span`,`new_admission`,`class_assigned`) VALUES
('CS01', '2', 'Class of English', 'F', '03', '10-5-2019', 'old', 'new'),
('CS02','1','Class of Urdu','M','01','10-5-2019','old','old'),
('CS02','3','Class of Urdu','F','04','10-5-2019','old','new'),
('CS03','4','Class of Science','M','05','14-5-2021','old','new'),
('CS04', '7', 'Class of Computer', 'F', '07', '16-5-2021', 'old', 'old'),
('CS05','6','Class of History','M','06','20-5-2020','old','new'),
('CS06','2','Class of Arts','M','02','10-7-2019','old','old'),
('CS06','10','Class of Arts','F','10','14-8-2021','new','old'),
('CS07','0','Class of Visual Arts','M','09','14-8-2021','new','old'),
('CS07','8','Class of Visual Arts','F','08','14-8-2021','new','new');
-- Dumping data for table `Student_Age`
```

```
INSERT INTO `Student Age` (`St ID`, `St Age`, `Class ID`) VALUES
('01','14','CS02'),
('02','12','CS06'),
('03','11','CS01'),
('04','10','CS02'),
('05','04','CS03'),
('06','09','CS05'),
('07','08','CS04'),
('08','07','CS07'),
('09','06','CS07'),
('10','05','CS06');
-- Dumping data for table `Section`
INSERT INTO `Section`(`Class_ID`, `Section_ID`, `Section_Name`) VALUES
('CS01','S01','A'),
('CS02','S02','A'),
('CS02','S03','B'),
('CS03','S04','A'),
('CS04','S05','A'),
('CS05','S06','A'),
('CS06','S07','A'),
('CS06','S08','B'),
('CS07','S09','A'),
('CS07','S10','B');
-- Dumping data for table `Person`
INSERT INTO `Person`
(`P_no`,`Number_of_Children`,`Father_Name`,`Mother_Name`,`Father_CNIC`,`Mother
_CNIC`,`Parent_address`,`Father_PhoneNo`,`Mother_PhoneNo`,`Father_Email`,`Moth
er_Email`,`Parent_jobtype`,`Guardian_Name`,`Guardian_CNIC`,`Guardian_address`,
`Guardian_PhoneNo`,`Guardian_Email`,`Guardian_Relation`,`new_parent`) VALUES
('1','1','Kashif Hamza','Hamda Syed','61101-4376543-1','61101-9234200-2','H.01
St.01 G-10/1 Islamabad','0308-5934123','0308-
5234671', 'Kashif.Hamza@gmail.com', 'Hamda.Syed@gmail.com', 'Employee At AAJ
News','Wahaj','61101-6182395-7','Wah Cantt','0315-
5168892','wahajrahman@gmail.com','Uncle','old'),
('2','2','Munir Asim','Fatima Munir','61101-5271233-3','61101-8234652-4','H.11
St.11 G-10/2 Islamabad','0304-4834321','0304-
5234671', 'Munir. Asim@gmail.com', 'Fatima. Munir@gmail.com', 'Employee At
PakWheels','Mishal','51100-7612942-1','B-17 Islamabad','0321-
7283965', 'mishal@yahoo.com', 'Aunt', 'old'),
```

```
('3','3','Umar Altaf','Ayesha Akram','61101-2173453-5','61101-7234908-6','H.21
St.12 G-10/3 Islamabad', '0302-9734356', '0302-
5234671', 'Umar.Altaf@gmail.com', 'Ayesha.Akram@gmail.com', 'Employee At AAJ
News','Ali','31100-7284912-4','Gulberg-3','0314-
7283924', 'Ali230@hotmail.com', 'Family Friend', 'old'),
('4','2','Latif Khan','Zainab Khan','61101-4074373-7','61101-6234699-8','H.31
St.19 G-10/4 Islamabad','0336-3834098','0336-
5234671', 'Latif.khatak@gmail.com', 'Zainab.tiktok@gmail.com', 'Youtuber', 'Qurat-
ul-Ain','51100-3456789-2','G-13','0312-
7839123', 'ainny555@gmail.com', 'Aunt', 'old'),
('5','2','Ehsan Khan','Rasheeda Khan','61101-3979873-9','61101-5234224-
2','H.41 St.20 F-10/1 Islamabad','0304-7534032','0304-
5234671', 'Ehsan.Khan@gmail.com', 'Rasheeda123@gmail.com', 'Producer At
VOA','Sara','72900-8129412-8','G-10','0312-8889123','sara@hotmail.com','Family
friend','old'),
('6','1', Abbas Amjad', Mahnoor Jeelani', 61101-2872233-1', 61101-4234229-
4', 'H.51 St.32 F-10/2 Islamabad', '0312-8434078', '0312-
5234671', 'Abbas.amjad@gmail.com', 'Mahnoor003@gmail.com', 'High Court
Judge', 'Zia', '87261-2837194-0', 'G-12', '0300-
1414714', 'ziahakeem@gmail.com', 'father in law', 'old'),
('7','4','Mirza Abdul Baig','Fajr Baig','61101-1777763-3','61101-3234231-
6', 'H.61 St.17 F-10/3 Islamabad', '0301-1334908', '0301-
5234671', 'Mirza.Baig@gmail.com', 'Fajr123@gmail.com', 'Unemployed', 'Aman', '56000
-6127481-2', 'Naval Ankrage', '0312-6273842', 'amanshah@yahoo.com', 'First
Cousine', 'old'),
('8','3','Azeem Hasan','Maria Abbas','61101-5671223-5','61101-5234666-8','H.71
St.18 F-10/4 Islamabad', '0309-4234254', '0309-
5234671', 'Azeem.hasan@gmail.com', 'Maria.abbas@gmail.com', 'Employee At
FAST(NUCES)','Moiz','51100-3105618-4','G-13','0312-
8681969', 'moiz@gmail.com', 'First Cousine', 'new'),
('9','2','Umar ibn Khalid','Khateja Khan','61101-6576543-7','61101-4234997-
2', 'H.81 St.23 E-11/1 Islamabad', '0320-5134987', '0320-
5234671', 'umar.khalid@gmail.com', 'itsKhateja@gmail.com', 'Staff member of
Hamaray Bachey','Taha','51100-2783923-2','G-10','0312-
4673829', 'taha@hotmail.com', 'Uncle', 'new'),
('10','3','Tahir Abbas','Bisma Batool','61101-7474323-9','61101-3234999-
4','H.91 St.21 G-11/2 Islamabad','0308-6034009','0308-
5234671', 'tahir.amaze@gmail.com', 'bisma.abbas@gmail.com', 'Employee At GEO
News', 'Maryam', '61100-2345678-0', 'E-11', '0331-
1234123', 'Maryam@yahoo.com', 'sister in law', 'new');
-- Dumping data for table `Fees`
INSERT INTO `Fees`(`St_ID`,`Class_ID`,
voucherNumber`,`amount`,`discount`,`numberofchildren`) VALUES
('St01','CS02','123056783','10000','0','1'),
```

```
('St02','CS06','223156780','10000','0','2'),
('St03','CS01','323256781','10000','30','3'),
('St04','CS02','423356783','10000','0','2'),
('St05','CS03','523456784','10000','0','2'),
('St06','CS05','623556785','10000','0','1'),
('St07','CS04','723656786','10000','50','4'),
('St08','CS07','823756787','10000','30','3'),
('St09','CS07','923856788','10000','100','2'),
('St10','CS06','023956789','10000','0','3');
```

### SQL statements as the answer to the needed 15 queries

```
QUERY 1:
CREATE PROCEDURE FindStudents() SELECT `St_ID`, `first_name`, `last_name` FROM
 student` END
QUERY 2:
CREATE PROCEDURE FindM Spouse()
SELECT `Mother_Name`, `Father_Name` FROM `person`
WHERE `Father_Name` IS NOT NULL
END
QUERY 3:
CREATE PROCEDURE GuardianList()
SELECT
    COUNT(p.Guardian_CNIC) AS GuardianList,
    p.Guardian Relation,
    s.first_name,
    s.last_name
FROM
    person p,
   student s
WHERE
   p.`Sr No.` = s.St ID
GROUP BY p.Guardian Relation
OUERY 4:
CREATE PROCEDURE ShowParents Children()
```

```
SELECT
    p.Father_Name, p.Mother_Name, s.first_name, s.last_name
FROM
    student s, person p
WHERE
   p.St_ID = s.St_ID
QUERY 5:
CREATE PROCEDURE studentSiblings()
SELECT
   COUNT(s.St_ID),
   s.P_no,
   c.Class_ID
FROM
   student s,
   person p,
   class_section c
WHERE
   p.P_no = s.P_no
   s.St_ID = c.St_ID
GROUP BY
   c.Class_ID;
Query 6:
CREATE PROCEDURE ShowNewClass()
SELECT
   c.St_ID,
   c.time_span,
   c.new_admission,
   c.class_assigned,
   s.first_name,
    s.last_name
FROM
    `class_section` c,
    `student` s
WHERE
    time_span = '14-8-2021' AND class_assigned = 'new' AND c.St_ID = s.St_ID;
```

```
Query 7:
CREATE PROCEDURE newStudent(IN time_span varchar(100), IN new_admission
varchar(100))
SELECT s.first_name, s.last_name FROM student s, class_section c WHERE c.St_ID
= s.St_ID AND     c.time_span = time_span AND c.new_admission = new_admission;
END
OUERY 8:
CREATE PROCEDURE newParents()
SELECT DISTINCT
    p.Father_Name,
   p.Mother_Name,
    s.P_no,
    s.first_name,
    s.last_name
FROM
    person p,
   student s,
   class_section c
WHERE
   p.P_no = s.P_no
   AND
    c.time_span = '10-5-2019'
    p.new_parent = 'new';
QUERY 9:
CREATE PROCEDURE ShowP_Introducers()
SELECT DISTINCT
    DATE_FORMAT(FROM_DAYS(DATEDIFF(CURDATE(),s.date_of_birth)), '%Y')+0 AS
"age",
   s.P_no,
    s.first_name,
   s.last_name,
    c.Class_ID,
   co.Course_name,
   p.`Father_Name`,
   p.Mother_Name
FROM
```

```
student s,
    person p,
    class_section c,
    course co
WHERE
   p.P_no = s.P_no
   AND
   s.St_ID = c.St_ID
   DATE_FORMAT(FROM_DAYS(DATEDIFF(CURDATE(),s.date_of_birth)), '%Y')+0 < 5</pre>
   co.St_ID = s.St_ID
GROUP BY
   c.Class_ID;
QUERY 12:
SELECT
   c.Class_ID,
   COUNT(S.St_ID) AS NoOfStudents
FROM
    student s,
    class_section c,
   person p
WHERE
   p.P_no = s.P_no AND s.St_ID = c.St_ID AND s.St_gender IN(
   SELECT
       s.St_gender
   FROM
       student s
   WHERE
        s.St_gender = 'Female' OR s.St_gender = 'Male'
GROUP BY
   c.Class_ID
QUERY 13:
CREATE TRIGGER inactiveStudents
AFTER INSERT
```

```
ON student FOR EACH ROW
UPDATE student SET dormant = dormant +1
END
SELECT
    s.St_ID,
    s.first_name,
    s.last_name,
    s.dormant
FROM
    student s
QUERY 14:
SELECT
    p.P_no,
    p.Father_Name,
    p.Mother_Name,
    p.Guardian_Name,
    p.Father_CNIC,
    p.Mother_CNIC,
    p.Guardian_CNIC,
    s.St_ID,
    s.first_name,
    s.last_name,
    s.St_gender
FROM
    student s,
    person p
WHERE
    s.P_no = P.P_no
QUERY 15:
SELECT
    p.P_no,
    s.St_ID,
   s.first_name,
    s.last_name,
    c.Class_ID
FROM
    student s,
    class_section c,
    person p
```

```
WHERE

p.P_no = s.P_no AND s.St_ID = c.St_ID

ORDER BY p.P_no ASC
```

## Other

### Assumption:

• The person enrolling the student can manually select the class they want to enroll the student into.