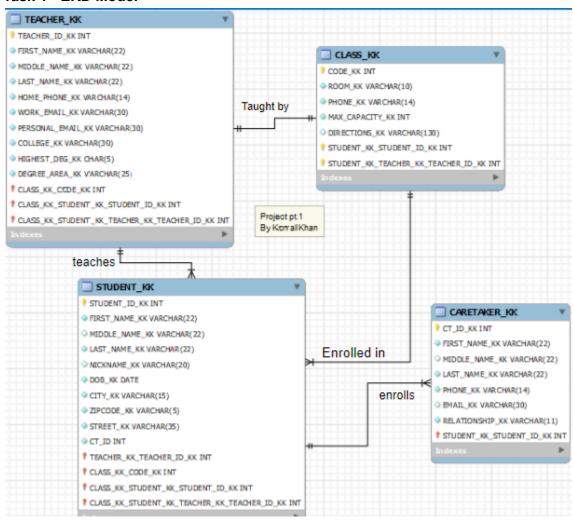
Assignment: P3 Name: Komal Khan Section: IT214 DL3

"Happy Learning" Kindergarten Operations
Database Query Report

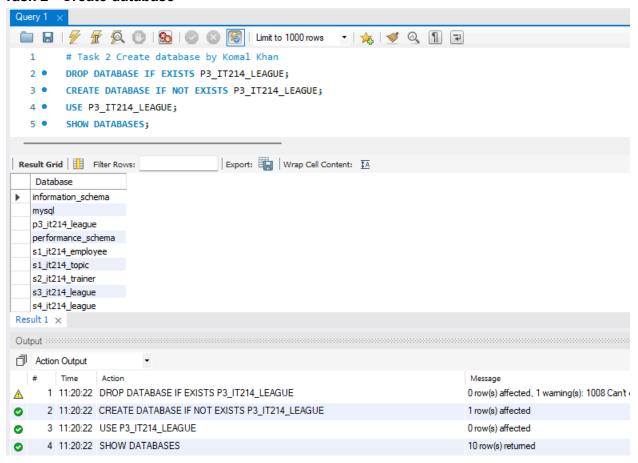


This database will be used to organize a private kindergarten's operations, managing its entities. These entities include classes, students, parents, and teachers, along with their attributes, foreign keys, and relationships. The queries written will go through the data and show students, parents, and teachers' relations, alphabetically.

# Task 1 - ERD Model



Task 2 - Create database



## Task 3 - Create tables

```
# Task 3 Create tables by Komal Khan
SHOW TABLES;

CREATE TABLE TEACHER (

TEACHER_ID INT PRIMARY KEY,

FIRST_NAME VARCHAR(22) NOT NULL,

MIDDLE_NAME VARCHAR(22),

LAST_NAME VARCHAR(22) NOT NULL,

HOME_PHONE CHAR(14) NOT NULL,

WORK_EMAIL VARCHAR(30) NOT NULL,

PERSONAL_EMAIL VARCHAR(30) NOT NULL,

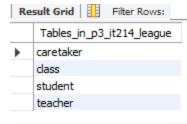
COLLEGE VARCHAR(30) NOT NULL,

HIGHEST_DEG CHAR(5) NOT NULL,

DEGREE_AREA VARCHAR(25) NOT NULL

);
```

```
· CREATE TABLE CLASS (
   CODE CHAR(2) PRIMARY KEY,
   LEVEL VARCHAR(10) NOT NULL,
   COLOR VARCHAR(10) NOT NULL,
   ROOM VARCHAR(10) NOT NULL UNIQUE,
   PHONE CHAR(14) NOT NULL UNIQUE,
   MAX_CAPACITY INT NOT NULL,
   DIRECTIONS VARCHAR(130)
);
 CREATE TABLE STUDENT (
   STUDENT ID INT PRIMARY KEY,
   FIRST NAME VARCHAR(22) NOT NULL,
   MIDDLE NAME VARCHAR(22),
   LAST_NAME VARCHAR(22) NOT NULL,
   NICKNAME VARCHAR(20),
   DOB DATE NOT NULL,
   STREET VARCHAR(35) NOT NULL,
   CITY VARCHAR(15) NOT NULL,
   ZIPCODE VARCHAR(5) NOT NULL,
   CLASS_CODE CHAR(2) NOT NULL REFERENCES CLASS(CODE)
 );
CREATE TABLE CARETAKER (
    CT_ID INT PRIMARY KEY,
    FIRST_NAME VARCHAR(22) NOT NULL,
    MIDDLE_NAME VARCHAR(22),
    LAST NAME VARCHAR(22) NOT NULL,
    PHONE VARCHAR(14) NOT NULL,
    EMAIL VARCHAR(30) NOT NULL,
     RELATIONSHIP VARCHAR(11)
   );
   SHOW TABLES;
   DESCRIBE TEACHER;
   DESCRIBE CLASS;
   DESCRIBE STUDENT;
   DESCRIBE CARETAKER;
 Result Grid Filter Rows:
     Tables_in_p3_it214_league
```



Re	esult Grid   🔢 Filter	Rows:		E	port:
	Field	Type	Null	Key	Def
•	TEACHER_ID	int(11)	NO	PRI	NULL
	FIRST_NAME	varchar(22)	NO		NULL
	MIDDLE_NAME	varchar(22)	YES		NULL
	LAST_NAME	varchar(22)	NO		NULL
	HOME_PHONE	char(14)	NO		NULL
	WORK_EMAIL	varchar(30)	NO		NULL
	PERSONAL_EMAIL	varchar(30)	NO		NULL
	COLLEGE	varchar(30)	NO		NULL
	HIGHEST_DEG	char(5)	NO		NULL
	DEGREE_AREA	varchar(25)	NO		NULL

Re	sult Grid 🔠 🔣 Filt	er Rows:		E	xport:
	Field	Type	Null	Key	Defa
<b>•</b>	CODE	int(11)	NO	PRI	NULL
	LEVEL	varchar(10)	NO		NULL
	COLOR	varchar(10)	NO		NULL
	ROOM	varchar(10)	NO	UNI	NULL
	PHONE	char(14)	NO	UNI	NULL
	MAX_CAPACITY	int(11)	NO		NULL
	DIRECTIONS	varchar(130)	YES		NULL

Re	Result Grid   II Filter Rows:						
	Field	Туре	Null	Key	Defa		
•	STUDENT_ID	int(11)	NO	PRI	NULL		
	FIRST_NAME	varchar(22)	NO		NULL		
	MIDDLE_NAME	varchar(22)	YES		NULL		
	LAST_NAME	varchar(22)	NO		NULL		
	NICKNAME	varchar(20)	YES		NULL		
	DOB	date	NO		NULL		
	STREET	varchar(35)	NO		NULL		
	CITY	varchar(15)	NO		NULL		
	ZIPCODE	varchar(5)	NO		NULL		
	CLASS_CODE	char(2)	NO		NULL		

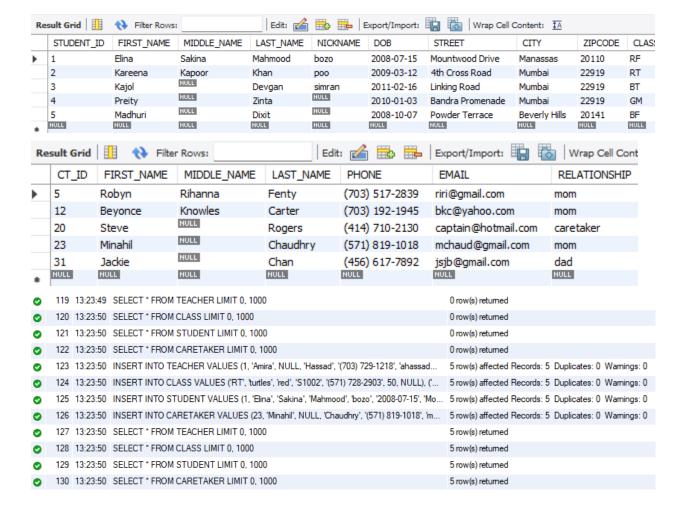
Result Grid   Filter Rows:								
	Field	Туре	Null	Key	Def			
•	CT_ID	int(11)	NO	PRI	NULL			
	FIRST_NAME	varchar(22)	NO		NULL			
	MIDDLE_NAME	varchar(22)	YES		NULL			
	LAST_NAME	varchar(22)	NO		NULL			
	PHONE	varchar(14)	NO		NULL			
	EMAIL	varchar(30)	NO		NULL			
	RELATIONSHIP	varchar(11)	YES		NULL			
	RELATIONSHIP	varcnar(11)	165					

0	8	11:40:20	SHOW DATABASES	10 row(s) returned
0	9	11:40:20	SHOW TABLES	0 row(s) returned
0	10	11:40:20	CREATE TABLE TEACHER ( $$ TEACHER_ID INT PRIMARY KEY, $$ FIRST_NAME VARCH	0 row(s) affected
0	11	11:40:20	CREATE TABLE CLASS ( $$ CODE INT PRIMARY KEY, $$ LEVEL VARCHAR(10) NOT NULL	0 row(s) affected
0	12	11:40:20	CREATE TABLE STUDENT ( STUDENT_ID INT PRIMARY KEY, FIRST_NAME VARC	0 row(s) affected
0	13	11:40:20	CREATE TABLE CARETAKER ( $$ CT_ID INT PRIMARY KEY, $$ FIRST_NAME VARCHAR(2	0 row(s) affected
0	14	11:40:20	SHOW TABLES	4 row(s) returned
0	15	11:40:20	DESCRIBE TEACHER	10 row(s) returned
0	16	11:40:20	DESCRIBE CLASS	7 row(s) returned
0	17	11:40:20	DESCRIBE STUDENT	10 row(s) returned
0	18	11:40:20	DESCRIBE CARETAKER	7 row(s) returned

### Task 4 - Add data

```
# Task 4 - Add data by Komal Khan
SELECT * FROM TEACHER;
SELECT * FROM CLASS;
SELECT * FROM STUDENT;
SELECT * FROM CARETAKER;
INSERT INTO TEACHER VALUES
(1, 'Amira', NULL, 'Hassad', '(703) 729-1218', 'ahassad@hotmail.com', 'ahassad@gmail.com', 'George Mason', 'PhD', 'Ca
(2, 'Shah', 'Rukh', 'Khan', '(201) 829-3920', 'kingkhan@yahoo.com', 'kingkhan@gmail.com', 'Princeton', 'BA', 'Acting'
(3, 'Aamir', NULL, 'Khan', '(571) 891-1939', 'aak@hotmail.com', 'aak@gmail.com', 'Harvard', 'BS', 'Drama'),
(4, 'Aishwarya', 'Rai', 'Bachan', '(703) 819-3810', 'aishb@hotmail.com', 'aishb@gmail.com', 'Cornell', 'MA', 'Acting'
(5, 'Jhanvi', NULL, 'Kapoor', '(414) 920-1980', 'nadpaar@outlook.com', 'nadpaar@gmail.com', 'VCU', 'BS', 'Drama');
INSERT INTO CLASS VALUES
('RT', 'turtles', 'red', 'S1002', '(571) 728-2903', 50, NULL),
('RF', 'foxes', 'red', 'D1022', '(703) 102-1920', 30, 'down the hall, left'),
('BF', 'foxes', 'blue', 'P2003', '(703) 192-1029', 35, 'upstairs'),
('GM', 'monkeys', 'green', 'D3001', '(342) 182-1429', 60, 'third floor'),
('BT', 'turtles', 'blue', 'S2019', '(571) 573-4521', 50, NULL);
INSERT INTO STUDENT VALUES
(1, 'Elina', 'Sakina', 'Mahmood', 'bozo', '2008-07-15', 'Mountwood Drive', 'Manassas', '20110', 'RF'),
(2, 'Kareena', 'Kapoor', 'Khan', 'poo', '2009-03-12', '4th Cross Road', 'Mumbai', '22919', 'RT'),
(3, 'Kajol', NULL, 'Devgan', 'simran', '2011-02-16', 'Linking Road', 'Mumbai', '22919', 'BT'),
(4, 'Preity', NULL, 'Zinta', NULL, '2010-01-03', 'Bandra Promenade', 'Mumbai', '22919', 'GM'),
(5, 'Madhuri', NULL, 'Dixit', NULL, '2008-10-07', 'Powder Terrace', 'Beverly Hills', '20141', 'BF');
```

#### INSERT INTO CARETAKER VALUES (23, 'Minahil', NULL, 'Chaudhry', '(571) 819-1018', 'mchaud@gmail.com', 'mom'), (12, 'Beyonce', 'Knowles', 'Carter', '(703) 192-1945', 'bkc@yahoo.com', 'mom'), (31, 'Jackie', NULL, 'Chan', '(456) 617-7892', 'jsjb@gmail.com', 'dad'), (20, 'Steve', NULL, 'Rogers', '(414) 710-2130', 'captain@hotmail.com', 'caretaker'), (5, 'Robyn', 'Rihanna', 'Fenty', '(703) 517-2839', 'riri@gmail.com', 'mom'); SELECT \* FROM TEACHER; SELECT \* FROM CLASS; SELECT \* FROM STUDENT; SELECT \* FROM CARETAKER; | Edit: 🚄 🖶 | Export/Import: 🏣 👸 | Wrap Cell Content: 🖽 LAST\_NAME HOME\_PHONE WORK\_EMAIL PERSONAL\_EMAIL TEACHER ID FIRST\_NAME COLLEGE HIGHEST\_DEG DEGREE AREA MIDDLE\_NAME NULL Result Grid Filter Rows: Edit: Kar Export LEVEL COLOR ROOM PHONE MAX CAPACITY DIRECTIONS NULL NULL NULL NULL NULL NULL NULL Edit: 🔏 🖶 Export/Import: 🙀 🦝 Wrap Cell Content: 🟗 Result Grid Filter Rows: STUDENT ID FIRST\_NAME MIDDLE\_NAME LAST\_NAME NICKNAME DOB STREET CITY ZIPCODE CLASS CODE NULL Edit: 🍊 🖶 Export/Import: MIDDLE\_NAME FIRST\_NAME LAST\_NAME PHONE **EMAIL** RELATIONSHIP NULL NULL NULL NULL NULL NULL NULL Edit: 🝊 🖶 Export/Import: 🖫 🖔 Wrap Cell Content: 🖽 TEACHER\_ID FIRST\_NAME HOME\_PHONE WORK\_EMAIL PERSONAL EMAIL MIDDLE\_NAME LAST\_NAME COLLEGE HIGH NULL 1 Amira Hassad (703) 729-1218 ahassad@hotmail.com ahassad@gmail.com George Mason PhD 2 Shah Rukh Khan (201) 829-3920 kingkhan@yahoo.com kingkhan@gmail.com Princeton BΑ NULL 3 aak@hotmail.com Aamir Khan (571) 891-1939 aak@gmail.com Harvard BS 4 MA Aishwarva Rai Bachan (703) 819-3810 aishb@hotmail.com aishb@gmail.com Cornell NULL Jhanvi Kapoor (414) 920-1980 nadpaar@outlook.com nadpaar@gmail.com VCU BS NULL NULL NULL Edit: 🚄 🖶 🖶 Export/Import: 📺 CODE LEVEL COLOR PHONE MAX\_CAPACITY DIRECTIONS ROOM BF foxes blue P2003 (703) 192-1029 upstairs NULL turtles S2019 (571) 573-4521 ВТ blue 50 third floor GM monkeys D3001 (342) 182-1429 60 green RF down the hall, left foxes red D1022 (703) 102-1920 30 NULL RT turtles red S1002 (571) 728-2903 50 NULL NULL NULL NULL NULL NULL NULL



### Task 5 - Query the data

```
# Task 5 Query the data by Komal Khan

SELECT CONCAT(STUDENT.FIRST_NAME, STUDENT.LAST_NAME) AS 'Student', LEVEL AS 'Level', COLOR, ROOM, CONCAT(TEACHER.FIRST_NAME, TEACHER.LAST_NAME)

FROM STUDENT, CLASS, TEACHER

ORDER BY STUDENT.FIRST_NAME ASC;

SELECT LEVEL, COLOR, CONCAT(STUDENT.FIRST_NAME, STUDENT.LAST_NAME) AS 'Student Name', NICKNAME

FROM STUDENT, CLASS

ORDER BY STUDENT.FIRST_NAME ASC;

SELECT CONCAT(CARETAKER.FIRST_NAME, CARETAKER.LAST_NAME) AS 'Parent Name', EMAIL, CONCAT(STUDENT.FIRST_NAME, STUDENT.LAST_NAME) AS 'Student Name'

FROM CARETAKER, STUDENT, CLASS

ORDER BY CARETAKER.FIRST_NAME ASC;

SELECT CONCAT(TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Teacher', CONCAT(CARETAKER.FIRST_NAME, CARETAKER.LAST_NAME) AS 'Parent', CONCAT(STUDENT, TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Teacher', CONCAT(CARETAKER.FIRST_NAME, CARETAKER.LAST_NAME) AS 'Parent', CONCAT(STUDENT, TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Parent', CONCAT(STUDENT, TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Parent', CONCAT(STUDENT, TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Parent', CONCAT(STUDENT, TEACHER.FIRST_NAME, TEACHER.FI
```

```
LEVEL AS 'Level', COLOR, ROOM, CONCAT(TEACHER.FIRST_NAME, TEACHER.LAST_NAME) AS 'Teacher'
```

AS 'Student Name', NICKNAME

t Name', EMAIL, CONCAT(STUDENT.FIRST\_NAME, STUDENT.LAST\_NAME) AS 'Student Name', LEVEL, COLOR

CONCAT(CARETAKER.FIRST\_NAME, CARETAKER.LAST\_NAME) AS 'Parent', CONCAT(STUDENT.FIRST\_NAME, STUDENT.LAST\_NAME) AS 'Student Name'

Re	sult Gri	d   📗	1	<b>()</b> F	ilter Rows:				
	Teach	er	Pa	rent			Student Name		
ShahKhan		Jac	JackieChan		El	inaMahmood			
	ShahKhan ShahKhan ShahKhan		Rob	ynFe	nty	Eli	naMahmood		
			JackieChan		Ma	adhuriDixit			
			Rob	oynFo	enty	Pr	reityZinta		
	ShahK	nan	Jac	kieCł	nan	K	ajolDevgan		
	ShahKh	nan	Ster	veRo	gers	Ka	ajolDevgan		
	ShahKh				gers		eityZinta		
	ShahKh	nan			Carter		areenaKhan		
Pare	ent					S+	udent		
Nan			EMAIL			ame	LEVEL	COLOR	
Beyo	nceCar	ter	bkc@	bkc@yahoo.com		Pre	eityZinta	turtles	blue
BeyonceCarter									
Beyo	nceCar	ter	bkc@	yah	oo.com	Elin	naMahmood	foxes	blue
	onceCari ieChan	ter			oo.com ail.com		iaMahmood jolDevgan	foxes foxes	blue blue
Jack		ter	jsjb@	@gma		Kaj			
Jack Jack	ieChan	ter	jsjb@ jsjb@	@gma @gma	ail.com	Kaj Kai	jolDevgan	foxes	blue
Jack Jack Jack	ieChan ieChan	ter	jsjb@ jsjb@ jsjb@	@gma @gma @gma	ail.com ail.com	Kaj Kai Pre	jolDevgan reenaKhan	foxes turtles	blue red
Jack Jack Jack Jack	ieChan ieChan ieChan	COL	jsjb@ jsjb@ jsjb@ jsjb@	⊕gma ⊕gma ⊕gma ⊕gma	ail.com ail.com ail.com ail.com	Kaj Kai Pre	jolDevgan reenaKhan eityZinta	foxes turtles foxes	blue red blue
Jack Jack Jack Jack	ieChan ieChan ieChan ieChan		jsjb@ jsjb@ jsjb@ jsjb@	@gma @gma @gma @gma Stu Nar	ail.com ail.com ail.com ail.com	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta dhuriDixit	foxes turtles foxes	blue red blue
Jack Jack Jack Jack	ieChan ieChan ieChan ieChan VEL	COL	jsjb@ jsjb@ jsjb@ jsjb@	@gma @gma @gma @gma Stu Nar	ail.com ail.com ail.com ail.com adent me	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta idhuriDixit NICKNAME	foxes turtles foxes	blue red blue
Jack Jack Jack Jack LEV	ieChan ieChan ieChan ieChan VEL	COL	jsjb@ jsjb@ jsjb@ jsjb@ OR	@gma @gma @gma @gma Stu Nar Elina	ail.com ail.com ail.com ail.com ail.com ail.com adent me	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta idhuriDixit NICKNAME bozo	foxes turtles foxes	blue red blue
Jack Jack Jack Jack LEV	ieChan ieChan ieChan ieChan ieChan ieChan /EL es des	COL blue blue	jsjb@ jsjb@ jsjb@ jsjb@ OR	@gma @gma @gma @gma Stu Nar Elina Elina	ail.com ail.com ail.com ail.com ail.com ail.com adent me aMahmood	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta dhuriDixit NICKNAME bozo bozo	foxes turtles foxes	blue red blue
Jack Jack Jack Jack LEV foxe turt mor	ieChan ieChan ieChan ieChan ieChan ieChan keL es des nkeys	COL blue blue greer	jsjb@ jsjb@ jsjb@ jsjb@ OR	@gma @gma @gma @gma Stu Nar Elina Elina Elina	ail.com	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta dhuriDixit NICKNAME bozo bozo bozo	foxes turtles foxes	blue red blue
Jack Jack Jack Jack turt foxe foxe	ieChan ieChan ieChan ieChan /EL es des ikeys es des	COL blue blue green red	jsjb@ jsjb@ jsjb@ jsjb@ OR	@gma @gma @gma @gma @gma Stu Nai Elina Elina Elina Elina	ail.com	Kaj Kar Pre Ma	jolDevgan reenaKhan eityZinta idhuriDixit NICKNAME bozo bozo bozo bozo	foxes turtles foxes	blue red blue
Jack Jack Jack Jack LEV foxe turt mor foxe turt	ieChan ieChan ieChan ieChan VEL es des keys es des es	COL blue blue greer red red	jsjb@ jsjb@ jsjb@ jsjb@ OR	@gma @gma @gma @gma Stu Nar Elina Elina Elina Elina Kajo	ail.com ail.com ail.com ail.com ail.com ail.com adent me aMahmood aMahmood aMahmood	Kaj Kai Pre Ma	jolDevgan reenaKhan eityZinta idhuriDixit NICKNAME bozo bozo bozo bozo bozo	foxes turtles foxes	blue red blue

Result Grid   1								
Student	Level	COLOR	ROOM	Teacher				
ElinaMahmood	foxes	blue	P2003	AishwaryaBa				
ElinaMahmood	turtles	red	S1002	JhanviKapoor				
ElinaMahmood	foxes	red	D1022	JhanviKapoor				
KajolDevgan	turtles	blue	S2019	ShahKhan				
KajolDevgan	foxes	blue	P2003	AmiraHassad				

0	295	14:02:22	SELECT CONCAT(STUDENT.FIRST_NAME, STUDENT.LAST_NAME) AS 'Student', LEVEL AS 'Level', COL	125 row(s) returned
•	296	14:02:22	${\tt SELECT\ LEVEL,\ COLOR,\ CONCAT(STUDENT.FIRST\_NAME,\ STUDENT.LAST\_NAME)\ AS\ 'Student\ Name',\ \dots}$	25 row(s) returned
•	297	14:02:22	SELECT CONCAT(CARETAKER.FIRST_NAME, CARETAKER.LAST_NAME) AS 'Parent Name', EMAIL, CON	125 row(s) returned
0	298	14:02:22	${\tt SELECT\ CONCAT(TEACHER.FIRST\_NAME,\ TEACHER.LAST\_NAME)\ AS\ 'Teacher',\ CONCAT(CARETAKER}$	125 row(s) returned