

Happy Learning Database

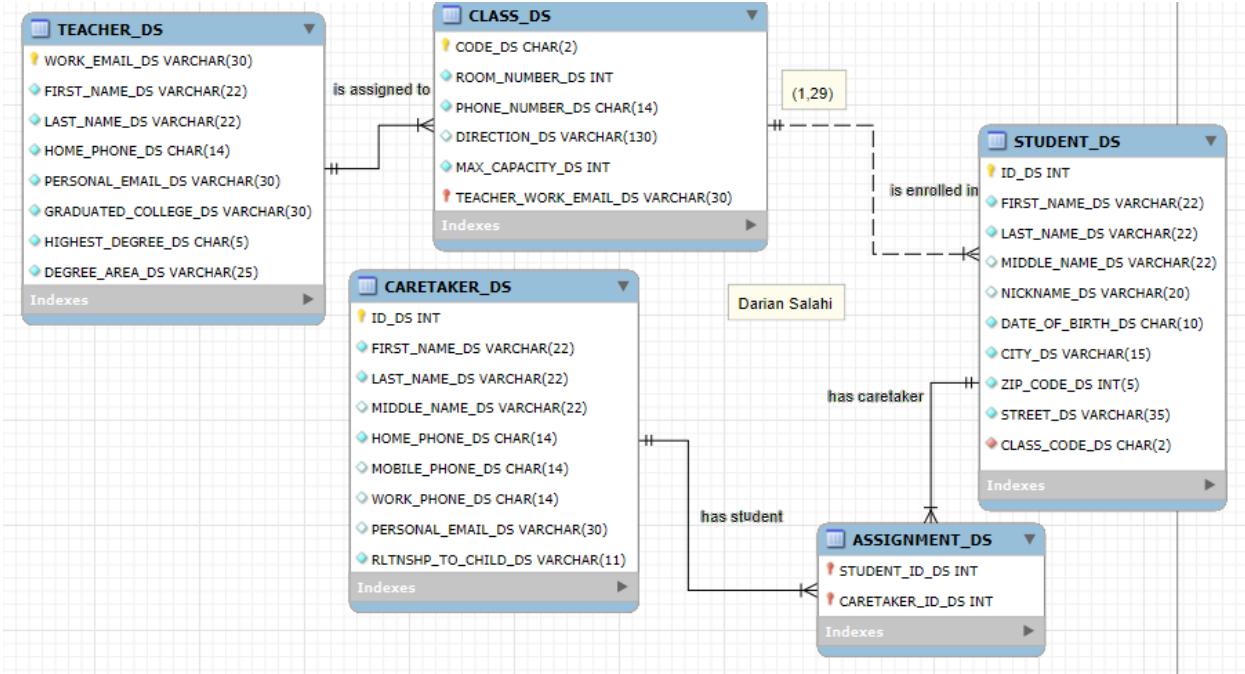
Project 3 Database Implementation

This database was developed based off of the project one ERD to help Happy Learning school manage their day to day operations. It stores information from students, caregivers, teachers and more to then allow that data to be queried and manipulated for easy information retrieval.



[AI Image Generator \(free, no sign-up, unlimited\) \(perchance.org\)](https://perchance.org)

Task 1 - ERD Model



Task 2 – Create database

```
1 -- TASK 2 Create database by Darian Salahie
2 • CREATE DATABASE HAPPY_LEARNING;
3 • USE HAPPY_LEARNING;
4 • SHOW DATABASES;
```

Result 2 x Read Only

Output:

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:26:12	CREATE DATABASE HAPPY_LEARNING	1 row(s) affected	0.047 sec
2	19:26:12	USE HAPPY_LEARNING	0 row(s) affected	0.000 sec
3	19:26:12	SHOW DATABASES	6 row(s) returned	0.000 sec / 0.000 sec

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

Database
gnu
▶ happy_learning
information_schema
mysql
performance_schema
sys

Result Grid Form Editor Field Types Query Stats

Task 3 – Create tables

```
5      -- Task 3 - Create tables by Darian Salahi
6 •  SHOW TABLES;
7 •  CREATE TABLE TEACHER_DS (
8      WORK_EMAIL_DS VARCHAR(30) PRIMARY KEY,
9      FIRST_NAME_DS VARCHAR(22) NOT NULL,
10     LAST_NAME_DS VARCHAR(22) NOT NULL,
11     HOME_PHONE_DS CHAR(14) NOT NULL,
12     PERSONAL_EMAIL_DS VARCHAR(30) NOT NULL,
13     GRADUATED_COLLEGE_DS VARCHAR(30) NOT NULL,
14     HIGHEST_DEGREE_DS CHAR(5) NOT NULL,
15     DEGREE_AREA_DS VARCHAR(25) NOT NULL
16 );
17 •  CREATE TABLE CLASS_DS (
18     CODE_DS CHAR(2) PRIMARY KEY,
19     ROOM_NUMBER_DS INT NOT NULL,
20     PHONE_NUMBER_DS CHAR(14) NOT NULL,
21     DIRECTION_DS VARCHAR(130),
22     MAX_CAPACITY_DS INT NOT NULL,
23     TEACHER_WORK_EMAIL_DS VARCHAR(30) NOT NULL,
24     FOREIGN KEY(TEACHER_WORK_EMAIL_DS) REFERENCES TEACHER_DS(WORK_EMAIL_DS)
25 );
26 •  CREATE TABLE CARETAKER_DS (
27     ID_DS INT PRIMARY KEY,
28     FIRST_NAME_DS VARCHAR(22) NOT NULL,
29     LAST_NAME_DS VARCHAR(22) NOT NULL,
30     MIDDLE_NAME_DS VARCHAR(22),
31     HOME_PHONE_DS CHAR(13) NOT NULL,
32     MOBILE_PHONE_DS CHAR(13),
33     WORK_PHONE_DS CHAR(13),
34     PERSONAL_EMAIL_DS VARCHAR(30),
35     RLTNSHP_TO_CHILD_DS VARCHAR(11) NOT NULL
36 );
```

```

37 • Ⓜ CREATE TABLE STUDENT_DS (
38     ID_DS INT PRIMARY KEY,
39     FIRST_NAME_DS VARCHAR(22) NOT NULL,
40     LAST_NAME_DS VARCHAR(22) NOT NULL,
41     MIDDLE_NAME_DS VARCHAR(22),
42     NICKNAME_DS VARCHAR(20),
43     DATE_OF_BIRTH_DS CHAR(10) NOT NULL,
44     CITY_DS VARCHAR(15) NOT NULL,
45     ZIP_CODE_DS INT(5) NOT NULL,
46     STREET_DS VARCHAR(35),
47     CLASS_CODE_DS CHAR(2) REFERENCES CLASS_DS(CODE_DS)
48 );
49 • Ⓜ CREATE TABLE ASSIGNMENT_DS (
50     STUDENT_ID_DS INT NOT NULL,
51     CARETAKER_ID_DS INT NOT NULL,
52     FOREIGN KEY(STUDENT_ID_DS) REFERENCES STUDENT_DS(ID_DS),
53     FOREIGN KEY(CARETAKER_ID_DS) REFERENCES CARETAKER_DS(ID_DS)
54 );
55 • SHOW TABLES;
56 • DESCRIBE TEACHER_DS;
57 • DESCRIBE CLASS_DS;
58 • DESCRIBE CARETAKER_DS;
59 • DESCRIBE STUDENT_DS;
60 • DESCRIBE ASSIGNMENT_DS;

```

#	Time	Action	Message	Duration / Fetch
1	21:13:23	CREATE DATABASE HAPPY_LEARNING		0.031 sec
2	21:13:23	USE HAPPY_LEARNING	1 row(s) affected	0.000 sec
3	21:13:23	SHOW DATABASES	6 row(s) returned	0.000 sec / 0.000 sec
4	21:13:23	SHOW TABLES	0 row(s) returned	0.000 sec / 0.000 sec
5	21:13:23	CREATE TABLE TEACHER_DS (WORK_EMAIL_DS VARCHAR(30) PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL, PHONE_NUMBER_DS CHAR(14) NOT NULL, ADDRESS_DS VARCHAR(50) NOT NULL)	0 row(s) affected	0.047 sec
6	21:13:23	CREATE TABLE CLASS_DS (CODE_DS CHAR(2) PRIMARY KEY, ROOM_NUMBER_DS INT NOT NULL, PHONE_NUMBER_DS CHAR(14) NOT NULL, ADDRESS_DS VARCHAR(50) NOT NULL)	0 row(s) affected	0.047 sec
7	21:13:23	CREATE TABLE CARETAKER_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL, PHONE_NUMBER_DS CHAR(14) NOT NULL, ADDRESS_DS VARCHAR(50) NOT NULL)	0 row(s) affected	0.031 sec
8	21:13:23	CREATE TABLE STUDENT_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL, MIDDLE_NAME_DS VARCHAR(22), NICKNAME_DS VARCHAR(20), DATE_OF_BIRTH_DS CHAR(10) NOT NULL, CITY_DS VARCHAR(15) NOT NULL, ZIP_CODE_DS INT(5) NOT NULL, STREET_DS VARCHAR(35), CLASS_CODE_DS CHAR(2) REFERENCES CLASS_DS(CODE_DS))	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in a future release.	0.047 sec
9	21:13:23	DESCRIBE STUDENT_DS	0 row(s) affected	0.047 sec
10	21:13:23	SHOW TABLES	5 row(s) returned	0.015 sec / 0.000 sec
11	21:13:23	DESCRIBE TEACHER_DS	8 row(s) returned	0.000 sec / 0.000 sec
12	21:13:23	DESCRIBE CLASS_DS	6 row(s) returned	0.000 sec / 0.000 sec
13	21:13:23	DESCRIBE CARETAKER_DS	9 row(s) returned	0.000 sec / 0.000 sec
14	21:13:23	DESCRIBE STUDENT_DS	10 row(s) returned	0.000 sec / 0.000 sec
15	21:13:23	DESCRIBE ASSIGNMENT_DS	2 row(s) returned	0.000 sec / 0.000 sec

Result Grid Filter Rows:	
	Database
▶	gmu
	happy_learning
	information_schema
	mysql
	performance_schema
	sys

Result Grid | Filter Rows:

Tables_in_happy_learning

Result 52 Result 53 Result 54 Result 55 Result 56 Result 57

Result Grid | Filter Rows:

Tables_in_happy_learning
▶ assignment_ds
caretaker_ds
class_ds
student_ds
teacher_ds

Result 52 Result 53 Result 54 Result 55 Result 56 Result 57

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

Field	Type	Null	Key	Default	Extra
▶ WORK_EMAIL_DS	varchar(30)	NO	PRI	NULL	
FIRST_NAME_DS	varchar(22)	NO		NULL	
LAST_NAME_DS	varchar(22)	NO		NULL	
HOME_PHONE_DS	char(14)	NO		NULL	
PERSONAL_EMAIL_DS	varchar(30)	NO		NULL	
GRADUATED_COLLEGE_DS	varchar(30)	NO		NULL	
HIGHEST_DEGREE_DS	HIGHEST_DEGREE_DS varchar(20)	NO		NULL	
DEGREE_AREA_DS					

Result 52 Result 53 Result 54 Result 55 Result 56 Result 57

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

	Field	Type	Null	Key	Default	Extra
▶	CODE_DS	char(2)	NO	PRI	NULL	
	ROOM_NUMBER_DS	int	NO		NULL	
	PHONE_NUMBER_DS	char(14)	NO		NULL	
	DIRECTION_DS	varchar(130)	YES		NULL	
	MAX_CAPACITY_DS	int	NO		NULL	
	TEACHER_WORK_EMAIL_DS	varchar(30)	NO	MUL	NULL	
					varchar(30)	

[Result 52](#) [Result 53](#) [Result 54](#) [Result 55](#) [Result 56](#) [Result 57](#)

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

	Field	Type	Null	Key	Default	Extra
▶	ID_DS	int	NO	PRI	NULL	
	FIRST_NAME_DS	varchar(22)	NO		NULL	
	LAST_NAME_DS	varchar(22)	NO		NULL	
	MIDDLE_NAME_DS	varchar(22)	YES		NULL	
	HOME_PHONE_DS	char(13)	NO		NULL	
	MOBILE_PHONE_DS	char(13)	YES		NULL	
	WORK_PHONE_DS	char(13)	YES		NULL	
	PERSONAL_EMAIL_DS	varchar(30)	YES		NULL	
	RLTNSHP_TO_CHILD_DS	varchar(11)	NO		NULL	

[Result 52](#) [Result 53](#) [Result 54](#) [Result 55](#) [Result 56](#) [Result 57](#)

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

	Field	Type	Null	Key	Default	Extra
▶	ID_DS	int	NO	PRI	NULL	
	FIRST_NAME_DS	varchar(22)	NO		NULL	
	LAST_NAME_DS	varchar(22)	NO		NULL	
	MIDDLE_NAME_DS	varchar(22)	YES		NULL	
	NICKNAME_DS	varchar(20)	YES		NULL	
	DATE_OF_BIRTH_DS	char(10)	NO		NULL	
	CITY_DS	varchar(15)	NO		NULL	
	ZIP_CODE_DS	int	NO		NULL	
	STREET_DS	varchar(35)	YES		NULL	
	CLASS_CODE_DS	char(2)	YES		NULL	

[Result 52](#) [Result 53](#) [Result 54](#) [Result 55](#) [Result 56](#) [Result 57](#) [Result 58](#)

Result Grid						
	Field	Type	Null	Key	Default	Extra
▶	STUDENT_ID_DS	int	NO	MUL	NULL	
	CARETAKER_ID_DS	int	NO	MUL	MUL	

Result 52 Result 53 Result 54 Result 55 Result 56 Result 57 Result 58 [Result 59](#) ×

Task 4 – Add data

```

61      -- Task 4 - Add data
62 •  SELECT * FROM TEACHER_DS;
63 •  SELECT * FROM CLASS_DS;
64 •  SELECT * FROM CARETAKER_DS;
65 •  SELECT * FROM STUDENT_DS;
66 •  SELECT * FROM ASSIGNMENT_DS;
67 •  INSERT INTO TEACHER_DS VALUES
68      ('JOHN.SMITH@HL.COM', 'John', 'Smith', '(703)-765-9876', 'john.smith@gmail.com', 'George Mason', 'B.A.', 'teaching'),
69      ('ALICE.JONES@HL.COM', 'Alice', 'Jones', '(703)-775-1234', 'alice.jones@gmail.com', 'Virginia Tech', 'M.A.', 'math'),
70      ('ROBERT.BROWN@HL.COM', 'Robert', 'Brown', '(202)-456-7890', 'robert.brown@gmail.com', 'Harvard', 'PhD', 'science'),
71      ('LINDA.WHITE@HL.COM', 'Linda', 'White', '(703)-456-9876', 'linda.white@gmail.com', 'GMU', 'B.S.', 'english'),
72      ('MICHAEL.JOHNSON@HL.COM', 'Michael', 'Johnson', '(571)-456-1234', 'michael.johnson@gmail.com', 'UVA', 'M.Ed.', 'history');
73 •  INSERT INTO CLASS_DS VALUES
74      ('A1', 101, '(703)-765-9806', 'Down the hall and take a left', 27, 'JOHN.SMITH@HL.COM'),
75      ('B2', 202, '(703)-765-9807', 'Near the main entrance', 25, 'ALICE.JONES@HL.COM'),
76      ('C3', 303, '(703)-765-9808', 'First floor, west wing', 30, 'ROBERT.BROWN@HL.COM'),
77      ('D4', 404, '(703)-765-9809', 'Second floor, east side', 20, 'LINDA.WHITE@HL.COM'),
78      ('E5', 505, '(703)-765-9810', 'Next to the library', 35, 'MICHAEL.JOHNSON@HL.COM');
79 •  INSERT INTO CARETAKER_DS VALUES
80      (15, 'Jane', 'Smith', 'Anne', '(703)-755-9876', '(703)-755-1234', '(703)-755-5678', 'jane.smith@gmail.com', 'mother'),
81      (25, 'James', 'Brown', NULL, '(202)-456-7890', '(202)-456-1234', NULL, 'james.brown@gmail.com', 'father'),
82      (35, 'Emily', 'Johnson', 'Rose', '(571)-456-7890', NULL, '(571)-456-1234', 'emily.johnson@gmail.com', 'aunt'),
83      (45, 'David', 'Jones', NULL, '(703)-555-7890', '(703)-555-1234', '(703)-555-5678', 'david.jones@gmail.com', 'uncle'),
84      (55, 'Sarah', 'Williams', 'Grace', '(571)-789-1234', '(571)-789-5678', NULL, 'sarah.williams@gmail.com', 'guardian');
85 •  INSERT INTO STUDENT_DS VALUES
86      (1, 'Jimmy', 'John', NULL, 'Jim', '2016-01-02', 'Vienna', 12345, 'Duke St.', 'A1'),
87      (2, 'Emma', 'Brown', 'Lily', 'Em', '2015-05-20', 'Fairfax', 22030, 'Main St.', 'B2'),
88      (3, 'Olivia', 'Smith', NULL, 'Liv', '2017-03-15', 'Reston', 20190, 'Maple Ave.', 'C3'),
89      (4, 'Noah', 'Johnson', 'James', 'N', '2018-07-10', 'Herndon', 20170, 'Pine St.', 'D4'),
90      (5, 'Liam', 'Williams', NULL, 'Lee', '2014-11-25', 'Arlington', 22201, 'Elm St.', 'E5');
91 •  INSERT INTO ASSIGNMENT_DS VALUES
92      (1, 15),      97 •  SELECT * FROM TEACHER_DS;
93      (2, 25),      98 •  SELECT * FROM CLASS_DS;
94      (3, 35),      99 •  SELECT * FROM CARETAKER_DS;
95      (4, 45),     100 •  SELECT * FROM STUDENT_DS;
96      (5, 55);      101 •  SELECT * FROM ASSIGNMENT_DS;
```

#	Time	Action	Message	Duration / Fetch
1	22:58:28	CREATE DATABASE HAPPY_LEARNING	1 row(s) affected	0.016 sec
2	22:58:28	USE HAPPY_LEARNING	0 row(s) affected	0.000 sec
3	22:58:28	SHOW DATABASES	6 row(s) returned	0.000 sec / 0.000 sec
4	22:58:28	SHOW TABLES	0 row(s) returned	0.000 sec / 0.000 sec
5	22:58:28	CREATE TABLE TEACHER_DS (WORK_EMAIL_DS VARCHAR(30) PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL, PHONE_NUMBER_DS CHAR(14) NOT NULL)	0 row(s) affected	0.047 sec
6	22:58:28	CREATE TABLE CLASS_DS (CODE_DS CHAR(2) PRIMARY KEY, ROOM_NUMBER_DS INT NOT NULL)	0 row(s) affected	0.046 sec
7	22:58:28	CREATE TABLE CARETAKER_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL)	0 row(s) affected	0.063 sec
8	22:58:28	CREATE TABLE STUDENT_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL)	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in a future release.	0.109 sec
9	22:58:29	CREATE TABLE ASSIGNMENT_DS (STUDENT_ID_DS INT NOT NULL, CARETAKER_ID_DS INT NOT NULL, FOREIGN KEY(STUDENT_ID_DS) REFERENCES STUDENT(ID_DS), FOREIGN KEY(CARETAKER_ID_DS) REFERENCES CARETAKER(ID_DS))	0 row(s) affected	0.078 sec
10	22:58:29	SHOW TABLES	5 row(s) returned	0.000 sec / 0.000 sec
11	22:58:29	DESCRIBE TEACHER_DS	8 row(s) returned	0.000 sec / 0.000 sec
12	22:58:29	DESCRIBE CLASS_DS	6 row(s) returned	0.000 sec / 0.000 sec
13	22:58:29	DESCRIBE CARETAKER_DS	9 row(s) returned	0.000 sec / 0.000 sec
14	22:58:29	DESCRIBE STUDENT_DS	10 row(s) returned	0.015 sec / 0.000 sec
15	22:58:29	DESCRIBE ASSIGNMENT_DS	2 row(s) returned	0.000 sec / 0.000 sec
16	22:58:29	SELECT * FROM TEACHER_DS LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
17	22:58:29	SELECT * FROM CLASS_DS LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
18	22:58:29	SELECT * FROM CARETAKER_DS LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
19	22:58:29	SELECT * FROM STUDENT_DS LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
20	22:58:29	SELECT * FROM ASSIGNMENT_DS LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
21	22:58:29	INSERT INTO TEACHER_DS VALUES (JOHN.SMITH@HL.COM, 'John', 'Smith', '1703-765-9876', john.smith@gmail.com, 'George Mason', 'B.A.', 'teac...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	5 row(s) affected	0.000 sec
22	22:58:29	INSERT INTO CLASS_DS VALUES (AT_101, (703)-765-9806, 'Down the hall and take a left', 27, JOHN.SMITH@HL.COM), (B2_202, (703)-765-980...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	5 row(s) affected	0.000 sec
23	22:58:29	INSERT INTO CARETAKER_DS VALUES (15, 'Jane', 'Smith', '1703-755-9876', (703)-755-1234, Jane.smith@gmail.com, 'Inoth...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	5 row(s) affected	0.000 sec
24	22:58:29	INSERT INTO STUDENT_DS VALUES (1, 'Jimmy', 'John', 'NULL', 'Jane', '2016-01-02', 'Venna', 12345, 'Duke St.', 'A1'), (2, 'Emma', 'Brown', 'Lily', 'En', '20...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	5 row(s) affected	0.000 sec
25	22:58:29	INSERT INTO ASSIGNMENT_DS VALUES (1, 15, (2, 25), (3, 35), (4, 45), (5, 55))	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.000 sec
26	22:58:29	SELECT * FROM TEACHER_DS LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
27	22:58:29	SELECT * FROM CLASS_DS LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
28	22:58:29	SELECT * FROM CARETAKER_DS LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
29	22:58:29	SELECT * FROM STUDENT_DS LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
30	22:58:29	SELECT * FROM ASSIGNMENT_DS LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Result Grid | Filter Rows:

	Database
▶	gmu
	happy_learning
	information_schema
	mysql
	performance_schema
	sys

Result 116 × Result 117

Result Grid | Filter Rows:

	Tables_in_happy_learning
--	--------------------------

Result 116 Result 117 × Res

Result Grid | Filter Rows:

	Tables_in_happy_learning
▶	assignment_ds
	caretaker_ds
	class_ds
	student_ds
	teacher_ds

Result 116 Result 117 [Result 118](#) ×

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

	Field	Type	Null	Key	Default	Extra
▶	WORK_EMAIL_DS	varchar(30)	NO	PRI	NULL	
	FIRST_NAME_DS	varchar(22)	NO		NULL	
	LAST_NAME_DS	varchar(22)	NO		NULL	
	HOME_PHONE_DS	char(14)	NO		NULL	
	PERSONAL_EMAIL_DS	varchar(30)	NO		NULL	
	GRADUATED_COLLEGE_DS	varchar(30)	NO		NULL	
	HIGHEST_DEGREE_DS	char(5)	NO		NULL	
	DEGREE_AREA_DS	varchar(25)	NO		NULL	

Result 116 Result 117 Result 118 [Result 119](#) × Result 120 Re

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

	Field	Type	Null	Key	Default	Extra
▶	CODE_DS	char(2)	NO	PRI	NULL	
	ROOM_NUMBER_DS	int	NO		NULL	
	PHONE_NUMBER_DS	char(14)	NO		NULL	
	DIRECTION_DS	varchar(130)	YES		NULL	
	MAX_CAPACITY_DS	int	NO		NULL	
	TEACHER_WORK_EMAIL_DS	varchar(30)	NO	MUL	NULL	

Result 116 Result 117 Result 118 Result 119 [Result 120](#) × Result 121

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

	Field	Type	Null	Key	Default	Extra
▶	ID_DS	int	NO	PRI	NULL	
	FIRST_NAME_DS	varchar(22)	NO		NULL	
	LAST_NAME_DS	varchar(22)	NO		NULL	
	MIDDLE_NAME_DS	varchar(22)	YES		NULL	
	HOME_PHONE_DS	char(14)	NO		NULL	
	MOBILE_PHONE_DS	char(14)	YES		NULL	
	WORK_PHONE_DS	char(14)	YES		NULL	
	PERSONAL_EMAIL_DS	varchar(30)	YES		NULL	
	RLTNSHP_TO_CHILD_DS	varchar(11)	NO		NULL	

Result 116 Result 117 Result 118 Result 119 Result 120 [Result 121](#) ×

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

	Field	Type	Null	Key	Default	Extra
▶	ID_DS	int	NO	PRI	NULL	
	FIRST_NAME_DS	varchar(22)	NO		NULL	
	LAST_NAME_DS	varchar(22)	NO		NULL	
	MIDDLE_NAME_DS	varchar(22)	YES		NULL	
	NICKNAME_DS	varchar(20)	YES		NULL	
	DATE_OF_BIRTH_DS	char(10)	NO		NULL	
	CITY_DS	varchar(15)	NO		NULL	
	ZIP_CODE_DS	int	NO		NULL	
	STREET_DS	varchar(35)	YES		NULL	
	CLASS_CODE_DS	char(2)	YES		NULL	

Result 116 Result 117 Result 118 Result 119 Result 120 Result 121 [Result 122](#) ×

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

	Field	Type	Null	Key	Default	Extra
▶	STUDENT_ID_DS	int	NO	MUL	NULL	
	CARETAKER_ID_DS	int	NO	MUL	NULL	

Result 116 Result 117 Result 118 Result 119 Result 120 Result 121 Result 122 [Result 123](#) ×

Result Grid			Filter Rows:
	STUDENT_ID_DS	CARETAKER_ID_DS	

	STUDENT_ID_DS	CARETAKER_ID_DS
▶	1	15
	2	25
	3	35
	4	45
	5	55

TASK 5 – Query the data

```

102      -- Task 5 - Query the data by Darian Salahi
103 •  SELECT
104      CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS Student,
105      CLASS_DS.MAX_CAPACITY_DS AS Level,
106      CLASS_DS.CODE_DS AS Color,
107      CLASS_DS.DIRECTION_DS AS Directions,
108      CONCAT(TEACHER_DS.FIRST_NAME_DS, ' ', TEACHER_DS.LAST_NAME_DS) AS Teacher
109  FROM STUDENT_DS
110  JOIN CLASS_DS ON STUDENT_DS.CLASS_CODE_DS = CLASS_DS.CODE_DS
111  JOIN TEACHER_DS ON CLASS_DS.TEACHER_WORK_EMAIL_DS = TEACHER_DS.WORK_EMAIL_DS
112  ORDER BY Student ASC;
113 •  SELECT
114      CLASS_DS.CODE_DS AS Color,
115      CLASS_DS.MAX_CAPACITY_DS AS Level,
116      CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS `Student Name`,
117      STUDENT_DS.ZIP_CODE_DS AS Zipcode
118  FROM STUDENT_DS
119  JOIN CLASS_DS ON STUDENT_DS.CLASS_CODE_DS = CLASS_DS.CODE_DS
120  ORDER BY Color, Level, `Student Name` ASC;
121 •  SELECT
122      CONCAT(CARETAKER_DS.FIRST_NAME_DS, ' ', CARETAKER_DS.LAST_NAME_DS) AS Parent,
123      CARETAKER_DS.WORK_PHONE_DS AS `Work Phone`,
124      CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS Student,
125      CLASS_DS.MAX_CAPACITY_DS AS Level,
126      CLASS_DS.CODE_DS AS Color
127  FROM ASSIGNMENT_DS
128  JOIN CARETAKER_DS ON ASSIGNMENT_DS.CARETAKER_ID_DS = CARETAKER_DS.ID_DS
129  JOIN STUDENT_DS ON ASSIGNMENT_DS.STUDENT_ID_DS = STUDENT_DS.ID_DS
130  JOIN CLASS_DS ON STUDENT_DS.CLASS_CODE_DS = CLASS_DS.CODE_DS
131  ORDER BY Parent, Student ASC;
132 •  SELECT
133      CONCAT(CARETAKER_DS.FIRST_NAME_DS, ' ', CARETAKER_DS.LAST_NAME_DS) AS Parent,

```

```

134     CONCAT(TEACHER_DS.FIRST_NAME_DS, ' ', TEACHER_DS.LAST_NAME_DS) AS Teacher,
135     CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS Student
136   FROM ASSIGNMENT_DS
137   JOIN CARETAKER_DS ON ASSIGNMENT_DS.CARETAKER_ID_DS = CARETAKER_DS.ID_DS
138   JOIN STUDENT_DS ON ASSIGNMENT_DS.STUDENT_ID_DS = STUDENT_DS.ID_DS
139   JOIN CLASS_DS ON STUDENT_DS.CLASS_CODE_DS = CLASS_DS.CODE_DS
140   JOIN TEACHER_DS ON CLASS_DS.TEACHER_WORK_EMAIL_DS = TEACHER_DS.WORK_EMAIL_DS
141 ORDER BY Parent, Teacher, Student ASC;

```

Output			
#	Time	Action	Message
1	23:10:34	DROP DATABASE HAPPY_LEARNING	5 row(s) affected
2	23:10:43	CREATE DATABASE HAPPY_LEARNING	1 row(s) affected
3	23:10:43	USE HAPPY_LEARNING	0 row(s) affected
4	23:10:43	SHOW DATABASES	6 row(s) returned
5	23:10:43	SHOW TABLES	0 row(s) returned
6	23:10:43	CREATE TABLE TEACHER_DS (WORK_EMAIL_DS VARCHAR(80) PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL)	0 row(s) affected
7	23:10:43	CREATE TABLE CLASS_DS (CODE_DS CHAR(2) PRIMARY KEY, ROOM_NUMBER_DS INT NOT NULL, PHONE_NUMBER_DS CHAR(14) NOT NULL)	0 row(s) affected
8	23:10:43	CREATE TABLE CARETAKER_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL)	0 row(s) affected
9	23:10:43	CREATE TABLE STUDENT_DS (ID_DS INT PRIMARY KEY, FIRST_NAME_DS VARCHAR(22) NOT NULL, LAST_NAME_DS VARCHAR(22) NOT NULL)	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in a future release.
10	23:10:43	CREATE TABLE ASSIGNMENT_DS (STUDENT_ID_DS INT NOT NULL, CARETAKER_ID_DS INT NOT NULL, FOREIGN KEY(STUDENT_ID_DS) REFERENCES STUDENT_DS(ID_DS), FOREIGN KEY(CARETAKER_ID_DS) REFERENCES CARETAKER_DS(ID_DS))	0 row(s) affected
11	23:10:43	SHOW TABLES	5 row(s) returned
12	23:10:43	DESCRIBE TEACHER_DS	0 row(s) returned
13	23:10:43	DESCRIBE CLASS_DS	6 row(s) returned
14	23:10:43	DESCRIBE CARETAKER_DS	9 row(s) returned
15	23:10:43	DESCRIBE STUDENT_DS	10 row(s) returned
16	23:10:43	DESCRIBE ASSIGNMENT_DS	2 row(s) returned
17	23:10:43	SELECT * FROM TEACHER_DS LIMIT 0, 1000	0 row(s) returned
18	23:10:43	SELECT * FROM CLASS_DS LIMIT 0, 1000	0 row(s) returned
19	23:10:43	SELECT * FROM CARETAKER_DS LIMIT 0, 1000	0 row(s) returned
20	23:10:43	SELECT * FROM STUDENT_DS LIMIT 0, 1000	0 row(s) returned
21	23:10:43	SELECT * FROM ASSIGNMENT_DS LIMIT 0, 1000	0 row(s) returned
22	23:10:43	INSERT INTO TEACHER_DS VALUES ('JOHN.SMITH@HLCOM', 'John', 'Smith', '(703)765-9876', 'john.smith@gmail.com', 'George Mason', 'B.A.', 'teac...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	0.000 sec
23	23:10:43	INSERT INTO CLASS_DS VALUES ('A1', 101, '(703)765-9806', 'Down the hall and take a left', 27, 'JOHN.SMITH@HLCOM'), ('B2', 202, '(703)765-980...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	0.015 sec
24	23:10:43	INSERT INTO CARETAKER_DS VALUES ('Jane', 'Smith', 'Anne', '(703)755-9876', '(703)755-1234', 'jane.smith@gmail.com', 'Instit...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	0.000 sec
25	23:10:43	INSERT INTO STUDENT_DS VALUES ('Jimmy', 'John', 'Jim', '2016-01-02', 'Venna', '12345', 'Duke St.', 'A1'), ('Emma', 'Brown', 'Lily', 'Em', '20...', 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0)	0.016 sec
26	23:10:43	INSERT INTO ASSIGNMENT_DS VALUES ('1', '15'), ('2', '25), ('3', '35), ('4', '45), ('5', '55)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0
27	23:10:43	SELECT * FROM TEACHER_DS LIMIT 0, 1000	5 row(s) returned
28	23:10:43	SELECT * FROM CLASS_DS LIMIT 0, 1000	5 row(s) returned
29	23:10:43	SELECT * FROM CARETAKER_DS LIMIT 0, 1000	5 row(s) returned
30	23:10:43	SELECT * FROM STUDENT_DS LIMIT 0, 1000	5 row(s) returned
31	23:10:43	SELECT * FROM ASSIGNMENT_DS LIMIT 0, 1000	5 row(s) returned
32	23:10:43	SELECT CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS Student, CLASS_DS.MAX_CAPACITY_DS AS Level, CARETAKER_DS.FIRST_NAME_DS AS Caretaker, CARETAKER_DS.LAST_NAME_DS AS Parent, CARETAKER_DS.WORK_PHONE..., 5 row(s) returned	0.015 sec / 0.000 sec
33	23:10:43	SELECT CLASS_DS.CODE_DS AS Color, CLASS_DS.MAX_CAPACITY_DS AS Level, CONCAT(STUDENT_DS.FIRST_NAME_DS, ' ', STUDENT_DS.LAST_NAME_DS) AS Student, CARETAKER_DS.FIRST_NAME_DS AS Caretaker, CARETAKER_DS.LAST_NAME_DS AS Parent, CARETAKER_DS.WORK_PHONE..., 5 row(s) returned	0.000 sec / 0.000 sec
34	23:10:43	SELECT CONCAT(CARETAKER_DS.FIRST_NAME_DS, ' ', CARETAKER_DS.LAST_NAME_DS) AS Parent, CARETAKER_DS.WORK_PHONE..., 5 row(s) returned	0.000 sec / 0.000 sec
35	23:10:43	SELECT CONCAT(CARETAKER_DS.FIRST_NAME_DS, ' ', CARETAKER_DS.LAST_NAME_DS) AS Parent, CONCAT(TEACHER_DS.FIRST_N..., 5 row(s) returned	0.000 sec / 0.000 sec

Result Grid				
	Student	Level	Color	Directions
▶	Emma Brown	25	B2	Near the main entrance
	Jimmy John	27	A1	Down the hall and take a left
	Liam Williams	35	E5	Next to the library
	Noah Johnson	20	D4	Second floor, east side
	Olivia Smith	30	C3	First floor, west wing
				Teacher
				Alice Jones
				John Smith
				Michael Johnson
				Linda White
				Robert Brown

Result Grid				
	Color	Level	Student Name	Zipcode
▶	A1	27	Jimmy John	12345
	B2	25	Emma Brown	22030
	C3	30	Olivia Smith	20190
	D4	20	Noah Johnson	20170
	E5	35	Liam Williams	22201

Result Grid | Filter Rows: Export: | W

	Parent	Work Phone	Student	Level	Color
▶	David Jones	(703)-555-5678	Noah Johnson	20	D4
	Emily Johnson	(571)-456-1234	Olivia Smith	30	C3
	James Brown	NULL	Emma Brown	25	B2
	Jane Smith	(703)-755-5678	Jimmy John	27	A1
	Sarah Williams	NULL	Liam Williams	35	E5

	Parent	Teacher	Student
▶	David Jones	Linda White	Noah Johnson
	Emily Johnson	Robert Brown	Olivia Smith
	James Brown	Alice Jones	Emma Brown
	Jane Smith	John Smith	Jimmy John
	Sarah Williams	Michael Johnson	Liam Williams