Student table:

```
CREATE TABLE Student
(
S_ID INT PRIMARY KEY,
Sname VARCHAR(50),
Semail VARCHAR(50),
Spass VARCHAR(50),
Sphone INT,
Sadd VARCHAR(50),
buildnum INT,
street VARCHAR(50),
zipcode INT
);
```

S_ID	Sname	Semail	Spass	Sphone	Sadd	buildnum	street
1	Farrand Pell	fpell0@sogou.com	H00DG8Sv	481239621	9 Iowa Parkway	905	Green Ridge
2	Jeri Penchen	jpenchen1@boston.com	rUsOOcR6j2	747577518	407 Express Place	899	Sloan
3	Elna Balmadier	ebalmadier2@homestead.com	cviAd3sX	799184305	77 Straubel Point	3136	Buell
4	Estell Barlee	ebarlee3@google.nl	ZkatYfcCEQU	557408756	1087 Carey Place	5210	Macpherson
5	Drusi Davidofski	ddavidofski4@amazon.co.uk	ZzTpTyn	759309149	4 Messerschmidt Alley	67545	John Wall
6	Trula Antcliff	tantcliff5@ycombinator.com	FVihBvSKSM	646381130	515 Northport Alley	609	Pawling
7	Angeline Gooday	agooday6@businesswire.com	B5Y6p5	386266901	21972 Shelley Drive	69	Leroy
8	Charyl Brunotti	cbrunotti7@vk.com	nOYywJKd0	2083996489	52968 Stoughton Road	70168	Crowley

Driver table:

```
CREATE TABLE Driver
(
D_ID INT PRIMARY KEY,
Dname VARCHAR(50),
Dstatus VARCHAR(50),
Dphone INT,
Demail VARCHAR(50),
Dpass VARCHAR(50),
Dadd VARCHAR(50),
buildnum INT,
street VARCHAR(50),
zipcode INT
);
```

D_ID	Dname	Dstatus	Dphone	Demail	Dpass	Dadd	buildnu
1	Gerard Trusdale	Waiting	985503510	gtrusdale0@wunderground.com	zbXWbi	84 Forest Run Plaza	3965
2	Hort Pollock	Busy	786661168	hpollock1@hugedomains.com	6VcZGET	23 Mockingbird Place	11763
3	Shalne Sherlock	Available	347618126	ssherlock2@geocities.com	QVpdoAmtE	3 Melody Pass	20
4	Alexandros Makeswell	Busy	644919098	amakeswell3@apple.com	U22jR4Df5qmH	518 Clove Terrace	2134
5	Bard Drinkeld	Busy	649084910	bdrinkeld4@tamu.edu	IX0yvxlFV	27 International Alley	32256
6	Omero Langhorne	Busy	948827689	olanghorne5@go.com	WxVhHK	3831 Pawling Plaza	6616
7	Reyna Isaak	Omero Langhorne	642758629	risaak6@nifty.com	n8DIhHfl	54417 Sundown Parkway	1847
8	Maximilien Lanney	Waiting	854047277	mlanney7@wikipedia.org	fsL0nyyKq3	65994 Oriole Trail	7
9	Petronilla Elleray	Waiting	684538875	pelleray8@eepurl.com	9sHITAI	1 Maywood Drive	73375
10	Armand Puller	Available	249164859	apuller9@deviantart.com	YNYYeotvsXvP	9 Quincy Road	50075

Vehicle table:

```
CREATE TABLE Vehicle
(
V_ID INT PRIMARY KEY,
V_model VARCHAR(50),
V_plate VARCHAR(50),
V_color VARCHAR(50)
);
```

V_ID	V_model	V_plate	V_color
1	Nissan	5FPYK1F24CB448282	Puce
2	GMC	5UXZW0C57CL648319	Yellow
3	Land Rover	SCFBB03C89G612719	Puce
4	Toyota	YV1902AH7E1674276	Aquamarine
5	Chevrolet	1YVHZ8BH9A5021681	Violet
6	GMC	WBXPA734X5W566810	Violet
7	Chevrolet	WVGAV7AX0BW108995	Indigo
8	Bentley	WAUEL94F56N869587	Purple
9	Chevrolet	WBXPC93477W761286	Red

Route table:

```
CREATE TABLE Route
(
Ro_ID INT PRIMARY KEY,
Ro_origin VARCHAR(50),
Ro_dest VARCHAR(50),
Ro_istops INT
);
```

Ro_ID	Ro_origin	Ro_dest	Ro_istops
1	2166 Loftsgordon Drive	407 Express Place	5
2	34 Old Gate Drive	71 Loftsgordon Pass	9
3	880 Hazelcrest Parkway	1087 Carey Place	2
4	841 Talmadge Circle	4 Messerschmidt Alley	5
5	517 Grasskamp Center	515 Northport Alley	1
6	8 Elgar Park	21972 Shelley Drive	6
7	3 Kropf Trail	52968 Stoughton Road	8
8	24568 Rockefeller Pass	6366 Iowa Park	6
9	1 Fremont Crossing	0 Ilene Drive	3

Ride table:

```
CREATE TABLE Ride
(
R_ID INT PRIMARY KEY,
R_type VARCHAR(50),
R_origin VARCHAR(50),
R_dest VARCHAR(50),
R_ptime DATETIME,
R_etime DATETIME
);
```

R_ID	R_type	R_origin	R_dest	R_ptime	R_etime
1	Pre-Booking	809 Fulton Park	798 Oakridge Street	2020-01-01 14:40:00	2020-01-01 06:52:00
2	Immediate	41321 Shoshone Pass	135 Sunbrook Crossing	2021-12-04 12:53:00	2021-12-05 04:29:00
3	Immediate	5 Moland Way	92311 Melrose Way	2023-03-05 20:06:00	2023-03-05 22:46:00
4	Immediate	3 Upham Road	35475 Boyd Drive	2021-12-05 03:34:00	2021-12-05 22:23:00
5	Pre-Booking	112 Larry Terrace	9 Iowa Parkway	2021-12-05 21:27:00	2021-12-06 08:48:00
6	Immediate	7147 1st Court	407 Express Place	2023-01-25 22:40:00	2023-01-25 12:32:00

Ride History Table:

```
CREATE TABLE Ride_History
(
  S_ID INT,
  D_ID INT,
  R_ID INT,
  V_ID INT,
  RH_etime DATETIME,
  RH_stime DATETIME,
  RH_origin VARCHAR(255),
  RH_dest VARCHAR(255),
  Rating INT,
  FOREIGN KEY (S_ID) REFERENCES Student (S_ID),
  FOREIGN KEY (D_ID) REFERENCES Driver (D_ID),
  FOREIGN KEY (V_ID) REFERENCES Vehicle (V_ID),
  FOREIGN KEY (R_ID) REFERENCES Ride (R_ID)
);
```

S_ID	D_ID	R_ID	V_ID	RH_etime	RH_stime	RH_origin	RH_dest	Rating
1	7	3	4	2023-03-05 22:46:00	2023-03-05 20:06:00	5 Moland Way	92311 Melrose Way	1
2	5	10	10	2023-01-05 23:40:00	2023-01-05 15:44:00	045 North Center	823 Sage Way	4
3	3	10	6	2023-01-05 23:40:00	2023-01-05 15:44:00	045 North Center	823 Sage Way	3
4	7	6	7	2023-01-25 12:32:00	2023-01-25 22:40:00	7147 1st Court	407 Express Place	5
5	7	10	4	2023-01-05 23:40:00	2023-01-05 15:44:00	045 North Center	823 Sage Way	1
6	4	2	9	2021-12-05 04:29:00	2021-12-04 12:53:00	41321 Shoshone Pass	135 Sunbrook Crossing	5
7	10	1	10	2020-01-01 06:52:00	2020-01-01 14:40:00	48 Miller Avenue	21972 Shelley Drive	3
8	2	8	4	2023-01-05 12:33:00	2023-01-05 17:23:00	843 Grasskamp Circle	1087 Carey Place	2

Notifications Table:

```
CREATE TABLE Notifications (
  N_ID INT PRIMARY KEY,
  Nmess VARCHAR(255)
);
```

N_ID	Nmess
1	Booked
2	Ride on the way
3	Arrived
4	Cancelled

Favorites table:

```
CREATE TABLE Favorites
(
Ftype VARCHAR(50) PRIMARY KEY,
Fdest VARCHAR(50)
);
```

Ftype	Fdest
Home	77 Straubel Point
Work	5 American Ash Point

Book table:
```
CREATE TABLE book (
  S_ID INT,
  R_ID INT,
  FOREIGN KEY (S_ID) REFERENCES Student (S_ID),
  FOREIGN KEY (R_ID) REFERENCES Ride (R_ID)
);
```

Assign Table:
```
CREATE TABLE assign (
  D_ID INT,
  V_ID INT,
  Ro_ID INT,
  FOREIGN KEY (D_ID) REFERENCES Driver (D_ID),
  FOREIGN KEY (V_ID) REFERENCES Vehicle (V_ID),
  FOREIGN KEY (Ro_ID) REFERENCES Route (Ro_ID)
);
```

Notifies Table:
```
CREATE TABLE Notifies (

  R_ID INT,

  S_ID INT,

  D_ID INT,

  FOREIGN KEY (R_ID) REFERENCES Ride (R_ID),

  FOREIGN KEY (S_ID) REFERENCES Student (S_ID),

  FOREIGN KEY (D_ID) REFERENCES Driver (D_ID)

);
```
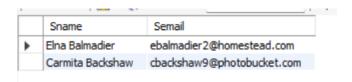
Some Example Queries:

#Retrieve the name and email of all students who have taken a ride with a specific driver:

SELECT Sname, Semail

FROM student

INNER JOIN ride_history ON student.S_ID = ride_history.S_ID

WHERE ride_history.D_ID = 3;

Sname	Semail
▶ Elna Balmadier	ebalmadier2@homestead.com
Carmita Backshaw	cbackshaw9@photobucket.com

#Get the names and contact information of all drivers who are currently available to drive:

SELECT Dname, Dphone, Demail

FROM driver

WHERE Dstatus = 'available';

Dname	Dphone	Demail
Shalne Sherlock	347618126	ssherlock2@geocities.com
Armand Puller	249164859	apuller9@deviantart.com

#Get the details of all rides that have corresponding ratings less than 3:

SELECT R.R_ID, R.R_origin, R.R_dest, R.R_ptime, R.R_etime, RH.Rating

FROM ride R

INNER JOIN ride_history RH ON R.R_ID = RH.R_ID

WHERE RH.Rating < 3;

R_ID	R_origin	R_dest	R_ptime	R_etime	Rating
3	5 Moland Way	92311 Melrose Way	2023-03-05 20:06:00	2023-03-05 22:46:00	1
10	045 North Center	823 Sage Way	2023-01-05 15:44:00	2023-01-05 23:40:00	1
8	843 Grasskamp Circle	1087 Carey Place	2023-01-05 17:23:00	2023-01-05 12:33:00	2
8	843 Grasskamp Circle	1087 Carey Place	2023-01-05 17:23:00	2023-01-05 12:33:00	2

#Select all routes that have less than and equal to 6 stop in between the origin and destination:

SELECT * FROM route WHERE Ro_istops <= 6;

Ro_ID	Ro_origin	Ro_dest	Ro_istops
1	2166 Loftsgordon Drive	407 Express Place	5
3	880 Hazelcrest Parkway	1087 Carey Place	2
4	841 Talmadge Circle	4 Messerschmidt Alley	5
5	517 Grasskamp Center	515 Northport Alley	1
6	8 Elgar Park	21972 Shelley Drive	6
8	24568 Rockefeller Pass	6366 Iowa Park	6
9	1 Fremont Crossing	0 Ilene Drive	3
NULL	NULL	NULL	NULL

#Select all rides where the end time is before a specific date and time:

SELECT * FROM ride WHERE R_etime < '2022-01-01 00:00:00';

R_ID	R_type	R_origin	R_dest	R_ptime	R_etime
1	Pre-Booking	809 Fulton Park	798 Oakridge Street	2020-01-01 14:40:00	2020-01-01 06:52:00
2	Immediate	41321 Shoshone Pass	135 Sunbrook Crossing	2021-12-04 12:53:00	2021-12-05 04:29:00
4	Immediate	3 Upham Road	35475 Boyd Drive	2021-12-05 03:34:00	2021-12-05 22:23:00
5	Pre-Booking	112 Larry Terrace	9 Iowa Parkway	2021-12-05 21:27:00	2021-12-06 08:48:00
7	Immediate	45 Hazelcrest Center	77 Straubel Point	2021-12-05 06:52:00	2021-12-05 22:38:00
NULL	NULL	NULL	NULL	NULL	NULL