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# Syracuse Housing Database

## IST 659 Final Report

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## PROJECT SUMMARY

In order to buy, rent or sell the property, customers have to rely on the property dealers for getting them the best prices or visit different websites, which in turn affects their decisions. However, all these do not provide them on the spot comparison or user reviews. Even students face a hard time while finding apartments if they are coming to a new country or city for studies. The proposed Information system would be a database, where the customers will be able to view property. The suggested database will include information about houses, localities, landlords, user reviews and comparison of various property retail websites. Since everything is online these days, it will turn out to be an easy option for the customers as it will save time and money. This would give the customer all the potential houses along with the prices offered by different websites and amenities present in the apartment. The target audience would be people who are potential buyers and leasers, viewing property for future transactions.

## BUSINESS RULES

- All the property retail websites are limited to Syracuse.
- The value of the property is in terms of dollars.
- Every property must have only one landlord.
- A landlord can own zero or multiple properties.
- Every property retail website has at least one property to display.

## ENTITY AND ATTRIBUTE TABLE

- 1) Users – Different type of users like students and buyers who view the property

Entity Name: Users	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	UserId	INT	NOT NULL	Unique identifier for Users Entity
Other Attributes	FName	Varchar (255)	NOT NULL	First Name of the User
	LName	Varchar (255)	NOT NULL	Last Name of the User
	City	Varchar (255)	NOT NULL	Name of the City
	Country	Varchar (255)	NOT NULL	Name of the Country
	DOB	Date	Optional	Date of Birth of the User
	Gender	Varchar (255)	NOT NULL	Gender of the User
	Email	Varchar (255)	NOT NULL	Email ID of the User
	Contact	Varchar (255)	NOT NULL	Contact number of the User
	MinBudget	INT	Optional	Minimum Budget of the User in dollars
	MaxBudget	INT	Optional	Maximum Budget of the User in dollars
	UserType	Varchar (2)	NOT NULL	Type of the User(B-Buyer, S- Student)

- 2) Student – Students who view the property for leasing in the future

Entity Name: Student	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY and FOREIGN KEY	UserId	INT	NOT NULL	Primary key and Foreign key for the Student table to establish a supertype subtype relationship between Users and Student
Other Attributes	Age	INT	NOT NULL	Age of the Student
	University Name	Varchar (255)	NOT NULL	Name of the students University

3) Buyer – Students who view the property for leasing in the future

Entity Name: Buyer	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY and FOREIGN KEY	UserId	INT	NOT NULL	Primary key and Foreign key for the Buyer table to establish a supertype subtype relationship between Users and Buyer
Other Attributes	Age	INT	NOT NULL	Age of the Student
	University Name	Varchar (255)	NOT NULL	Name of the students University

4) Landlord – People who own the property(Owner/Landlord)

Entity Name: Landlord	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	LandlordId	INT	NOT NULL	Unique identifier for Landlord Entity
Other Attributes	FName	Varchar (255)	NOT NULL	First Name of the Landlord
	LName	Varchar (255)	NOT NULL	Last Name of the Landlord
	Email	Varchar (255)	NOT NULL	Email ID of the Landlord
	Contact	Varchar (255)	NOT NULL	Contact number of the Landlord

5) Property – Types of property and its description (Rental or Property for  
Sale)

Entity Name: Property	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	PropertyId	INT	NOT NULL	Unique identifier for Property Entity
Other Attributes	PlotNumber	INT	NOT NULL	Apartment or House number
	FloorNumber	INT	Optional	Floor number(1 or 2)

	StreetName	Varchar (255)	NOT NULL	Name of the street where the property is located
	Zip	INT	NOT NULL	Zip code the area
	TotalArea	INT	Optional	Total Area of the property
	PropertyBuiltDate	Date	Optional	Date when the property was built
	.PropertyType	Varchar (2)	NOT NULL	Type of the property(Rental ~R Property or Property for Sale ~ S)
	LandlordId	INT	NOT NULL	Foreign key for the Property table to establish a relationship between property and landlord

- 6) Rental Property – Details regarding the Rental Property and lease of the property

Entity Name: RentalProperty	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	PropertyId	INT	NOT NULL	Primary key and Foreign key for the RentalProperty table to establish a supertype subtype relationship between Property and RentalProperty
Other Attributes	LeaseStartDate	Date	NOT NULL	Start Date of the lease
	LeaseEndDate	Date	NOT NULL	End Date of the lease
	LeaseTerm	INT	NOT NULL	Term of the lease (6 months or 12 months)
	MonthlyRent	INT	NOT NULL	Monthly Rent of the apartment
	Security Deposit	INT	NOT NULL	Amount of the Security Deposit

- 7) PropertyForSale – Details regarding the Rental Property and lease of the property

Entity Name: PropertyForSale	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	PropertyId	INT	NOT NULL	Primary key and Foreign key for the PropertyForSale table to establish a supertype subtype relationship between Property and PropertyForSale
Other Attributes	Price	INT	NOT NULL	Price of the property offered by the landlord in dollars
	Negotiable	Varchar (4)	Optional	Is the price negotiable (Y or N)

- 8) Feature – Details about various features of the property

Entity Name: Feature	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	FeatureId	INT	NOT NULL	Primary key for the Feature table
Other Attributes	FeatureName	Varchar (255)	NOT NULL	Name of the feature
	Value	INT	Optional	Value of a particular feature (ex. Parking-2, Heating-1)
FOREIGN KEY	PropertyId	INT	NOT NULL	Foreign key for the Feature table to establish a relationship between property and feature

- 9) FeatureDesc – Detailed Description about the Feature name

Entity Name: FeatureDesc	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	FeatureDescId	INT	NOT NULL	Primary key for the FeatureDesc table

Other Attributes	FeatureName	Varchar (255)	Optional	Name of the feature
	Description	Varchar (255)	Optional	For example: Description about the Parking feature

10) RetailWebsite – Details regarding different Websites

Entity Name: Retail Website	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	Websiteld	INT	NOT NULL	Primary key for the RetailWebsite table
Other Attributes	WebsiteName	Varchar (255)	UNIQUE	Name of the Website
	Contact	Varchar (255)	Optional	Contact number of the website

11) Display – Associative entity between RetailWebsite and Property to show the details about the property on a particular website

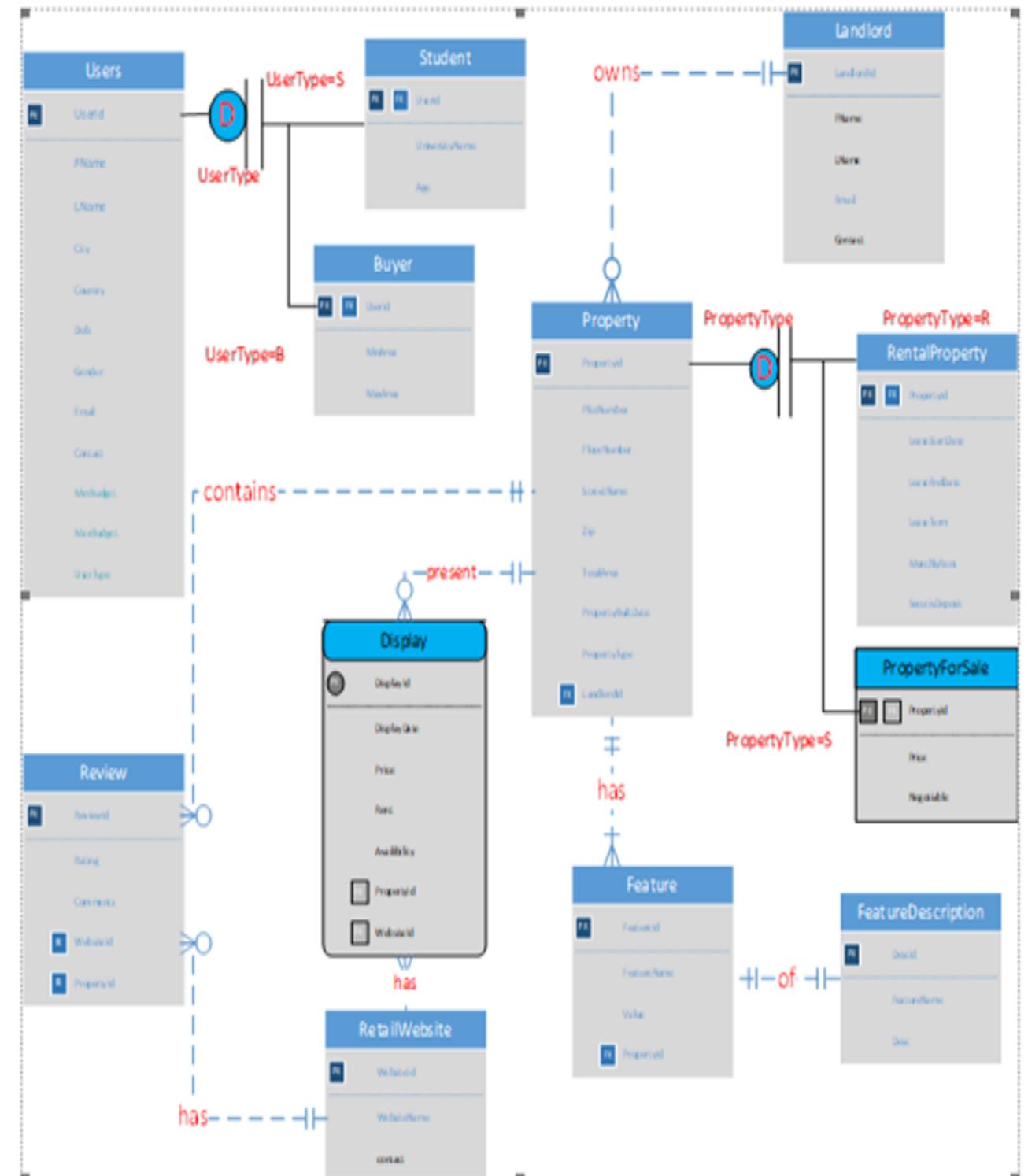
Entity Name: Display	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	DisplayId	INT	NOT NULL	Primary key for the Display table
Other Attributes	DisplayDate	Date	Optional	Date when the property was displayed
	Availability	Varchar (4)	Optional	Depicting whether the property is available or not (Y or N)
	Price	INT	Optional	Price of the property on a particular website
	Rent	INT	Optional	Rent of the property on a particular website
	FOREIGN KEY	PropertyId	INT	NOT NULL Foreign key for the Display table to establish a relationship between property and display
	Websiteld	INT	NOT NULL	Foreign key for the Display table to

				establish a relationship between RetailWebsite and feature
--	--	--	--	--

12) Review – Details regarding the review of the property

Entity Name: Review	Attribute Name	Field Type	Optional/NOT NULL	Explanation
PRIMARY KEY	ReviewId	INT	NOT NULL	Primary key for the Review table
Other Attributes	Rating	Decimal (5,2)	Optional	Rating for a property (1 to 5)
	Comments	Varchar (255)	Optional	Comments about a property (For ex. Good Location)
FOREIGN KEY	PropertyId	INT	NOT NULL	Foreign key for the Review table to establish a relationship between property and review
	WebsitId	INT	NOT NULL	Foreign key for the Review table to establish a relationship between RetailWebsite and review

## ENTITY-RELATIONSHIP DIAGRAM



## DATABASE INFRASTRUCTURE

The database system infrastructure used is based on a client-server model. SQL Server is used as the database engine and Access is used as the interface design tool. Data is inserted, deleted, updated, and queried from the SQL Server database with the help of forms on Access. Useful data stored on the SQL Server database can also be viewed with the help of reports generated through Access.

## CREATION OF TABLES

```
CREATE TABLE Users
(
    UserID int NOT NULL PRIMARY KEY,
    Fname varchar (255) NOT NULL,
    LName varchar (255) NOT NULL,
    City varchar (255) NOT NULL,
    Country varchar (255) NOT NULL,
    DOB date,
    Gender varchar (255) NOT NULL,
    Email varchar (255) NOT NULL,
    Contact varchar(255) NOT NULL,
    MinBudget int,
    MaxBudget int,
    UserType varchar(2) NOT NULL
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of a 'Users' table with the following schema:

```
CREATE TABLE Users
(
    UserID int NOT NULL PRIMARY KEY,
    Fname varchar(255) NOT NULL,
    LName varchar(255) NOT NULL,
    City varchar(255) NOT NULL,
    Country varchar(255) NOT NULL,
    DOB date,
    Gender varchar(255) NOT NULL,
    Email varchar(255) NOT NULL,
    Contact varchar(255) NOT NULL,
    MinBudget int,
    MaxBudget int,
    UserType varchar(2) NOT NULL
);
```

The status bar at the bottom indicates "Command(s) completed successfully."

```
CREATE TABLE STUDENT
(
    UserId int NOT NULL PRIMARY KEY,
    UniversityName varchar(255) NOT NULL,
    Age int NOT NULL,
    FOREIGN KEY(UserId) REFERENCES Users(UserId)
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of a 'STUDENT' table with the following schema:

```
CREATE TABLE STUDENT
(
    UserId int NOT NULL PRIMARY KEY,
    UniversityName varchar(255) NOT NULL,
    Age int NOT NULL,
    FOREIGN KEY(UserId) REFERENCES Users(UserId)
);
```

The status bar at the bottom indicates "Command(s) completed successfully."

```
CREATE TABLE Buyer
(
    UserId int NOT NULL PRIMARY KEY,
```

```
MinArea int,  
MaxArea int,  
FOREIGN KEY(UserId) REFERENCES Users(UserId)  
);
```

The screenshot shows the SQL Server Management Studio interface. A query window is open with the following code:

```
CREATE TABLE Buyer  
(  
    UserId int NOT NULL PRIMARY KEY,  
    MinArea int,  
    MaxArea int,  
    FOREIGN KEY(UserId) REFERENCES Users(UserId)  
);
```

The code is highlighted in blue, indicating it is SQL syntax. Below the code, a message bar shows "Command(s) completed successfully.".

```
CREATE TABLE Landlord  
(  
    LandlordId int NOT NULL PRIMARY KEY,  
    FName varchar(255) NOT NULL,  
    LName varchar(255) NOT NULL,  
    Email varchar(255) NOT NULL,  
    Contact varchar(255) NOT NULL  
);
```

The screenshot shows the SQL Server Management Studio interface. A query window is open with the following code:

```
CREATE TABLE Landlord  
(  
    LandlordId int NOT NULL PRIMARY KEY,  
    FName varchar(255) NOT NULL,  
    LName varchar(255) NOT NULL,  
    Email varchar(255) NOT NULL,  
    Contact varchar(255) NOT NULL  
);
```

The code is highlighted in blue, indicating it is SQL syntax. Below the code, a message bar shows "Command(s) completed successfully.".

Create Table Property

```
(  
    PropertyId int NOT NULL Primary Key,  
    PlotNumber int NOT NULL,  
    FloorNumber int,  
    StreetName varchar(255) NOT NULL,  
    Zip int NOT NULL,  
    TotalArea int,  
    PropertyBuiltDate date,  
    PropertyType varchar(2) NOT NULL,  
    LandlordId int Foreign Key References Landlord(LandlordId)  
)
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of the 'Property' table. The table structure includes columns for PropertyId (Primary Key), PlotNumber, FloorNumber, StreetName, Zip, TotalArea, PropertyBuiltDate, PropertyType, and LandlordId (Foreign Key). The command was executed successfully, as indicated by the message 'Command(s) completed successfully.' in the Messages pane.

```
Create Table Property  
(  
    PropertyId int NOT NULL Primary Key,  
    PlotNumber int NOT NULL,  
    FloorNumber int,  
    StreetName varchar(255) NOT NULL,  
    Zip int NOT NULL,  
    TotalArea int,  
    PropertyBuiltDate date,  
    PropertyType varchar(2) NOT NULL,  
    LandlordId int Foreign Key References Landlord(LandlordId)  
)
```

100 % <

Messages

Command(s) completed successfully.

Create Table RentalProperty

```
(  
    PropertyId int NOT NULL Primary key,  
    LeaseStartDate date NOT NULL,  
    LeaseEndDate date NOT NULL,  
    LeaseTerm int NOT NULL,  
    MonthlyRent int NOT NULL,  
    SecurityDeposit int NOT NULL,  
    FOREIGN KEY(PropertyId) REFERENCES Property(PropertyId)  
)
```

```
Create Table RentalProperty
(
    PropertyId int NOT NULL Primary key,
    LeaseStartDate date NOT NULL,
    LeaseEndDate date NOT NULL,
    LeaseTerm int NOT NULL,
    MonthlyRent int NOT NULL,
    SecurityDeposit int NOT NULL,
    FOREIGN KEY(PropertyId) REFERENCES Property(PropertyId)
);

100 % < Messages
Command(s) completed successfully.
```

```
Create Table PropertyForSale
(
    PropertyId int NOT NULL Primary key,
    Price int NOT NULL,
    Negotiable varchar(4),
    FOREIGN KEY(PropertyId) REFERENCES Property(PropertyId)
);

Create Table PropertyForSale
(
    PropertyId int NOT NULL Primary key,
    Price int NOT NULL,
    Negotiable varchar(4),
    FOREIGN KEY(PropertyId) REFERENCES Property(PropertyId)
);

100 % < Messages
Command(s) completed successfully.
```

```
Create Table Feature
(
    FeatureId int NOT NULL Primary Key,
    FeatureName varchar(255),
    Value int,
    PropertyId int Foreign Key References Property(PropertyId)
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of the 'Feature' table:

```
Create Table Feature
(
    FeatureId int NOT NULL Primary Key,
    FeatureName varchar(255),
    Value int,
    PropertyId int Foreign Key References Property(PropertyId)
);
```

The 'Messages' tab at the bottom indicates that the command completed successfully.

```
Create Table FeatureDescription
(
    FeatureDescId int NOT NULL Primary key,
    FeatureName varchar(255),
    Description varchar(255)
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of the 'FeatureDescription' table:

```
Create Table FeatureDescription
(
    FeatureDescId int NOT NULL Primary key,
    FeatureName varchar(255),
    Description varchar(255)
);
```

The 'Messages' tab at the bottom indicates that the command completed successfully.

```
Create Table RetailWebsite
(
    WebsiteId int NOT NULL Primary Key,
    WebsiteName varchar(255) UNIQUE,
    Contact varchar(255)
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of a table named 'RetailWebsite'. The table has three columns: 'WebsiteId' (int, primary key), 'WebsiteName' (varchar(255), unique), and 'Contact' (varchar(255)). The command was executed successfully, as indicated by the message 'Command(s) completed successfully.' in the 'Messages' tab.

```
Create Table RetailWebsite
(
    WebsiteId int NOT NULL Primary Key,
    WebsiteName varchar(255) UNIQUE,
    Contact varchar(255)
);
```

100 % <

Messages

Command(s) completed successfully.

```
Create Table Display
(
    DisplayId int NOT NULL Primary Key,
    DisplayDate date,
    Availability varchar(4),
    Price int,
    Rent int,
    PropertyId int Foreign Key References Property(PropertyId),
    WebsiteId int Foreign Key References RetailWebsite(WebsiteId)
);
```

The screenshot shows the SQL Server Management Studio interface. A query window displays the creation of a table named 'Display'. The table has six columns: 'DisplayId' (int, primary key), 'DisplayDate' (date), 'Availability' (varchar(4)), 'Price' (int), 'Rent' (int), and two foreign key columns, 'PropertyId' (int, references 'Property(PropertyId)') and 'WebsiteId' (int, references 'RetailWebsite(WebsiteId)'). The command was executed successfully, as indicated by the message 'Command(s) completed successfully.' in the 'Messages' tab.

```
Create Table Display
(
    DisplayId int NOT NULL Primary Key,
    DisplayDate date,
    Availability varchar(4),
    Price int,
    Rent int,
    PropertyId int Foreign Key References Property(PropertyId),
    WebsiteId int Foreign Key References RetailWebsite(WebsiteId)
);
```

100 % <

Messages

Command(s) completed successfully.

```
Create Table Review
(
ReviewId int NOT NULL Primary Key,
Rating decimal(5,2),
Comments varchar(255),
WebsiteId int Foreign Key References RetailWebsite(WebsiteId),
PropertyId int Foreign Key References Property(PropertyId)
);
```

The screenshot shows a SQL query window in SSMS. The query is:

```
Create Table Review
(
ReviewId int NOT NULL Primary Key,
Rating decimal(5,2),
Comments varchar(255),
WebsiteId int Foreign Key References RetailWebsite(WebsiteId),
PropertyId int Foreign Key References Property(PropertyId)
);
```

The results pane shows a single row:

Messages
Command(s) completed successfully.

-----Inserting the data-----

```
-----RetailWebsite-----
Insert into RetailWebsite
Values(1,'Orange Housing','315-545-4675');

Insert into RetailWebsite
Values(2,'Zillow','315-856-3376');

Insert into RetailWebsite
Values(3,'Syracuse Quality Living','315-346-6112');

Select * from RetailWebsite;
```

```
100 % <
Results Messages
|-----|-----|-----|-----|
|     | Websiteld | WebsiteName | Contact |
|-----|-----|-----|-----|
| 1   | 1          | Orange Housing | 315-545-4675 |
| 2   | 2          | Zillow          | 315-856-3376 |
| 3   | 3          | Syracuse Quality Living | 315-346-6112 |
```

-----Inserting data in Landlord Table-----

Insert into Landlord

Values(1,'Becky','Xin','bxin@gmail.com','315-378-6733');

Insert into Landlord

Values(2,'Dave','Hornstein','dahornstein@gmail.com','315-436-4733');

Insert into Landlord

Values(3,'Joan','Grant','jgrant@gmail.com','315-413-4949');

Insert into Landlord

Values(4,'Brad','Stalter','bradStal@gmail.com','315-565-7689');

Insert into Landlord

Values(5,'Stacy','Romano','stromano@gmail.com','315-634-2778');

Insert into Landlord

Values(6,'Azan','Hosein','ahosein@gmail.com','315-776-4487');

Insert into Landlord

Values(7,'Robert','Frank','rfrank@gmail.com','315-386-4629');

Insert into Landlord

Values(8,'Sean','Corcoran','scorcor@gmail.com','315-721-6733');

Insert into Landlord

Values(9,'Ryan','Mone','rmone@gmail.com','315-267-2418');

Insert into Landlord

Values(10,'Erica','Ramos','eramos@gmail.com','315-298-9933');

Select \* from Landlord;

The screenshot shows a SQL query window with the command "Select \* from Landlord;". The results pane displays a table with 10 rows of data. The columns are LandlordId, FName, LName, Email, and Contact. The data includes various names and contact information for 10 different landlords.

	LandlordId	FName	LName	Email	Contact
1	1	Becky	Xin	bxin@gmail.com	315-378-6733
2	2	Dave	Homstein	dahomstein@gmail.com	315-436-4733
3	3	Joan	Grant	jgrant@gmail.com	315-413-4949
4	4	Brad	Stalter	bradStal@gmail.com	315-565-7689
5	5	Stacy	Romano	stromano@gmail.com	315-634-2778
6	6	Azan	Hosein	ahosein@gmail.com	315-776-4487
7	7	Robert	Frank	rfrank@gmail.com	315-386-4629
8	8	Sean	Corcoran	scorcor@gmail.com	315-721-6733
9	9	Ryan	Mone	mone@gmail.com	315-267-2418
10	10	Erica	Ramos	eramos@gmail.com	315-298-9933

-----Inserting data in Property table-----

```
Insert into Property
Values(1,710,1,'South Beech',13210,1000,'1910','R',1)
```

```
Insert into Property
Values(2,716,1,'South Beech',13210,1500,'1903','R',2)
```

```
Insert into Property
Values(3,514,2,'Clarendon',13210,1250,'1990','R',3)
```

```
Insert into Property
Values(4,1021,2,'Lancaster',13210,1050,'1965','R',4)
```

```
Insert into Property
Values(5,440,2,'Westcott',13210,1300,'1948','R',5)
```

```
Insert into Property
Values(6,543,1,'Columbus',13210,800,'1969','R',6)
```

```
Insert into Property
Values(7,555,1,'Columbus',13210,750,'1985','R',7)
```

```
Insert into Property
Values(8,620,2,'Westcott',13210,1200,'1936','R',8)
```

```
Insert into Property
Values(9,1110,1,'Lexington',13210,1400,'1974','R',9)
```

Insert into Property  
Values(10,258,2,'Ackerman',13210,900,'2000','R',10)

Insert into Property  
Values(11,700,1,'Westcott',13210,1570,'1910','S',1)

Insert into Property  
Values(12,111,3,'Westcott',13210,1070,'1980','S',2)

Insert into Property  
Values(13,490,2,'Clarendon',13210,800,'2005-05-04','S',3)

Insert into Property  
Values(14,1090,2,'Lancaster',13210,500,'2007-05-04','S',4)

Insert into Property  
Values(15,220,1,'Westcott',13210,2000,'1880-05-04','S',5)

Insert into Property  
Values(16,320,1,'Westcott',13210,2050,'1890-05-04','S',6)

Insert into Property  
Values(17,420,1,'Westcott',13210,1150,'1990-05-04','S',7)

Insert into Property  
Values(18,490,3,'Westcott',13210,1750,'1992-05-04','S',8)

Insert into Property  
Values(19,900,2,'Westcott',13210,1700,'1995-05-04','S',9)

Insert into Property  
Values(20,970,2,'Westcott',13210,1480,'1998-05-04','S',10)

Insert into Property  
Values(21,870,2,'Westcott',13210,1080,'1998-05-04','R',1)

Insert into Property  
Values(22,333,3,'Westcott',13210,1880,'1999-04-04','R',2)

Insert into Property  
Values(23,343,3,'Ackerman',13210,2280,'2000-04-04','R',2)

Insert into Property  
Values(24,943,2,'Basset',13210,1080,'2001-04-04','R',3)

Insert into Property  
Values(25,43,2,'Basset',13210,1080,'2003-06-04','R',4)

Insert into Property  
Values(26,123,2,'Westcott',13210,3080,'2003-07-04','S',5)

Insert into Property  
Values(27,3,2,'Westcott',13210,1600,'2000-06-08','S',6)

Insert into Property

Values(28,738,2,'Basset',13210,2040,'1993-06-04','S',7)

Insert into Property

Values(29,803,2,'Ackerman',13210,1000,'1801-06-04','S',8)

Insert into Property

Values(30,582,2,'Lexington',13210,1090,'1903-06-04','S',9)

Select \* from Property;

The screenshot shows a SQL query results window with the following details:

- Query: `Select * from Property;`
- Results pane: A table with 30 rows of data.
- Table Headers: PropertyId, PlotNumber, FloorNumber, StreetName, Zip, TotalArea, PropertyBuiltDate, PropertyType, LandlordId.
- Data Rows (approximate values):

PropertyId	PlotNumber	FloorNumber	StreetName	Zip	TotalArea	PropertyBuiltDate	PropertyType	LandlordId
1	710	1	South Beech	13210	1000	1910-01-01	R	1
2	716	1	South Beech	13210	1500	1903-01-01	R	2
3	514	2	Clarendon	13210	1250	1990-01-01	R	3
4	1021	2	Lancaster	13210	1050	1965-01-01	R	4
5	440	2	Westcott	13210	1300	1948-01-01	R	5
6	543	1	Columbus	13210	800	1969-01-01	R	6
7	555	1	Columbus	13210	750	1985-01-01	R	7
8	620	2	Westcott	13210	1200	1936-01-01	R	8
9	1110	1	Lexington	13210	1400	1974-01-01	R	9
10	258	2	Ackerman	13210	900	2000-01-01	R	10
11	700	1	Westcott	13210	1570	1910-01-01	S	1
12	111	3	Westcott	13210	1070	1980-01-01	S	2
13	490	2	Clarendon	13210	800	2005-05-04	S	3
14	1090	2	Lancaster	13210	500	2007-05-04	S	4
15	220	1	Westcott	13210	2000	1880-05-04	S	5
16	320	1	Westcott	13210	2050	1890-05-04	S	6
17	420	1	Westcott	13210	1150	1990-05-04	S	7
18	490	3	Westcott	13210	1750	1992-05-04	S	8
19	900	2	Westcott	13210	1700	1995-05-04	S	9
20	970	2	Westcott	13210	1480	1998-05-04	S	10
21	870	2	Westcott	13210	1080	1998-05-04	R	1
22	333	3	Westcott	13210	1880	1999-04-04	R	2
23	343	3	Ackerman	13210	2280	2000-04-04	R	2
24	943	2	Basset	13210	1080	2001-04-04	R	3
- Message bar: "Query executed successfully."
- Status bar: "ist-s-students.syr.edu (12... | AD\okmutrej (80) | IST659\_M003\_okmutrej | 00:00:00 | 30 rows"

-----Insert data in RentalProperty table-----

Insert into RentalProperty

Values(1,'08-01-2018','08-01-2019',12,385,1200)

Insert into RentalProperty

Values(2,'08-05-2018','08-05-2019',12,400,1500)

Insert into RentalProperty

Values(3,'07-31-2018','07-31-2019',12,440,2000)

Insert into RentalProperty

Values(4,'08-02-2018','01-31-2019',6,350,1000)

Insert into RentalProperty

Values(5,'08-04-2018','01-31-2019',6,450,2000)

Insert into RentalProperty

Values(6,'08-01-2018','08-01-2019',12,325,900)

```
Insert into RentalProperty  
Values(7,'08-10-2018','08-10-2019',12,350,1000)
```

```
Insert into RentalProperty  
Values(8,'07-25-2018','07-25-2019',12,500,2500)
```

```
Insert into RentalProperty  
Values(9,'07-27-2018','07-27-2019',12,475,2250)
```

```
Insert into RentalProperty  
Values(10,'07-01-2018','12-31-2019',6,430,1800)
```

```
Insert into RentalProperty  
Values(21,'01-01-2018','06-30-2018',6,440,2000)
```

```
Insert into RentalProperty  
Values(22,'07-05-2018','07-04-2019',12,490,800)
```

```
Insert into RentalProperty  
Values(23,'09-06-2018','03-05-2019',6,520,1500)
```

```
Insert into RentalProperty  
Values(24,'02-01-2018','01-31-2019',12,380,2000)
```

```
Insert into RentalProperty  
Values(25,'10-11-2018','04-10-2019',6,600,1800)
```

```
Select * from RentalProperty;
```

The screenshot shows a SQL query window with the following details:

- Query: `Select * from RentalProperty;`
- Results pane: Shows a table with 15 rows of data.
- Table Headers: PropertyId, LeaseStartDate, LeaseEndDate, LeaseTerm, MonthlyRent, SecurityDeposit.
- Data Rows:

PropertyId	LeaseStartDate	LeaseEndDate	LeaseTerm	MonthlyRent	SecurityDeposit
1	2018-08-01	2019-08-01	12	385	1200
2	2018-08-05	2019-08-05	12	400	1500
3	2018-07-31	2019-07-31	12	440	2000
4	2018-08-02	2019-01-31	6	350	1000
5	2018-08-04	2019-01-31	6	450	2000
6	2018-08-01	2019-08-01	12	325	900
7	2018-08-10	2019-08-10	12	350	1000
8	2018-07-25	2019-07-25	12	500	2500
9	2018-07-27	2019-07-27	12	475	2250
10	2018-07-01	2019-12-31	6	430	1800
11	2018-01-01	2018-06-30	6	440	2000
12	2018-07-05	2019-07-04	12	490	800
13	2018-09-06	2019-03-05	6	520	1500
14	2018-02-01	2019-01-31	12	380	2000
15	2018-10-11	2019-04-10	6	600	1800

-----Inserting data in PropertyForSale table-----

```
Insert into PropertyForSale  
Values(11,80000,'Y')
```

```
Insert into PropertyForSale  
Values(12,90000,'Y')
```

```
Insert into PropertyForSale  
Values(13,75000,'N')
```

```
Insert into PropertyForSale  
Values(14,85000,'Y')
```

```
Insert into PropertyForSale  
Values(15,65000,'N')
```

```
Insert into PropertyForSale  
Values(16,95000,'Y')
```

```
Insert into PropertyForSale  
Values(17,100000,'Y')
```

```
Insert into PropertyForSale  
Values(18,85000,'Y')
```

```
Insert into PropertyForSale
```

```
Values(19,60000,'N')

Insert into PropertyForSale
Values(20,65000,'N')

Insert into PropertyForSale
Values(26,58000,'N')

Insert into PropertyForSale
Values(27,75000,'N')

Insert into PropertyForSale
Values(28,88000,'Y')

Insert into PropertyForSale
Values(29,105000,'Y')

Insert into PropertyForSale
Values(30,92000,'Y')

Select * from PropertyForSale;
```

The screenshot shows the SQL Server Management Studio interface with a query window containing the following code:

```
Select * from PropertyForSale;
```

The results pane displays the data from the PropertyForSale table:

	PropertyId	Price	Negotiable
1	11	80000	Y
2	12	90000	Y
3	13	75000	N
4	14	85000	Y
5	15	65000	N
6	16	95000	Y
7	17	100000	Y
8	18	85000	Y
9	19	60000	N
10	20	65000	N
11	26	58000	N
12	27	75000	N
13	28	88000	Y
14	29	105000	Y
15	30	92000	Y

-----Inserting data in Users table-----

```
Insert into Users
Values(1,'Omkar','Mutreja','Syracuse','USA','11-02-1993','Male','okmutrej@syr.edu','315- 440-2418',300,500,'S')
```

```
Insert into Users
Values(2,'Sumegha','Arora','Syracuse','USA','06-21- 1992','Female','suarora@syr.edu','315-440-5567',300,550,'S')

Insert into Users
Values(3,'Rohan','Kunwer','Syracuse','USA','01-18-1993','Male','rkunwer@syr.edu','315- 440-3367',350,525,'S')

Insert into Users
Values(4,'Ankita','Nagar','Syracuse','USA','10-29-1993','Female','anagar@syr.edu','315- 476-3898',200,500,'S')

Insert into Users
Values(5,'Vamsee','Metlapalli','Syracuse','USA','06-05-1991','Male','vmetlpalli@syr.edu','315-657-9485',200,400,'S')

Insert into Users
Values(6,'Shreya','Chowdhary','Syracuse','USA','10-18-1993','Female','schowdhary@gmail.com','315-454-6634',200,500,'S')

Insert into Users
Values(7,'Savni','Ankalikar','Syracuse','USA','02-15-1993','Female','sankaikar@gmail.com','667-445-9485',200,600,'S')

Insert into Users
Values(8,'Kirti','Hassani','Syracuse','USA','03-25-1996','Female','khassani@syr.edu','315-223-5488',250,550,'S')

Insert into Users
Values(9,'Ritesh','Dhakkad','Syracuse','USA','08-14-1993','Male','rdhakkad@syr.edu','315-445-3667',300,520,'S')

Insert into Users
Values(10,'Ananya','Bhupathli','Syracuse','USA','04-17-1993','Female','abhupathali@syr.edu','315-221-4533',300,600,'S')

Insert into Users
Values(11,'Chris','Adams','Boston','USA','09-27-1983','Male','chadams@gmail.com','617-221-3533',70000,90000,'B')

Insert into Users
Values(12,'Loki','Ferguson','Boston','USA','04-27-1985','Male','lferguson@gmail.com','617-556-7634',65000,85000,'B')

Insert into Users
Values(13,'Jazz','Kerry','Texas','USA','04-17-1993','Female','jazzkerry@gmail.com','915-554-4533',75000,90000,'B')

Insert into Users
Values(14,'Luiana','Williams','Maryland','USA','07-07-1979','Female','lwilliams@gmail.com','667-445-6745',75000,100000,'B')

Insert into Users
Values(15,'Josua','Patterson','Syracuse','USA','02-13-1986','Male','jpatterson@gmail.com','315-445-4699',60000,75000,'B')

Insert into Users
Values(16,'Jack','Samuel','California','USA','01-13-1984','Male','jacks@gmail.com','315-444-7679',60000,85000,'B')

Insert into Users
Values(17,'Annie','Hattway','New York','USA','10-12-1969','Female','ann@gmail.com','315-544-7779',90000,105000,'B')

Insert into Users
```

Values(18,'Harley','Davidson','Colorado','USA','06-21-1959','Female','harldavid@gmail.com','315-484-1979',80000,95000,'B')

Insert into Users

Values(19,'Jennifer','Aniston','Denver','USA','11-02-1967','Female','jena@gmail.com','315-443-0009',60000,70000,'B')

Insert into Users

Values(20,'Sean','Sam','Pittsburgh','USA','06-15-1984','Male','sean@gmail.com','315-242-7119',70000,125000,'B')

Select \* from Users;

The screenshot shows a SQL query results window. At the top, there is a toolbar with a magnifying glass icon and a dropdown menu set to '100 %'. Below the toolbar is a header row with columns: UserID, Fname, LName, City, Country, DOB, Gender, Email, Contact, MinBudget, MaxBudget, and UserType. The data is presented in a grid format with 20 rows, each corresponding to a user entry from the previous INSERT statements.

	UserID	Fname	LName	City	Country	DOB	Gender	Email	Contact	MinBudget	MaxBudget	UserType
1	1	Omkar	Mutreja	Syracuse	USA	1993-11-02	Male	okmutrej@syr.edu	315-440-2418	300	500	S
2	2	Sumegha	Arora	Syracuse	USA	1992-06-21	Female	suarora@syr.edu	315-440-5567	300	550	S
3	3	Rohan	Kunwer	Syracuse	USA	1993-01-18	Male	rkunwer@syr.edu	315-440-3367	350	525	S
4	4	Ankita	Nagar	Syracuse	USA	1993-10-29	Female	anagar@syr.edu	315-476-3898	200	500	S
5	5	Vamsee	Metlapalli	Syracuse	USA	1991-06-05	Male	vmetlapalli@syr.edu	315-657-9485	200	400	S
6	6	Shreya	Chowdhary	Syracuse	USA	1993-10-18	Female	schowdhary@gmail.com	315-454-6634	200	500	S
7	7	Savni	Ankalikar	Syracuse	USA	1993-02-15	Female	sankaikar@gmail.com	667-445-9485	200	600	S
8	8	Kriti	Hassani	Syracuse	USA	1996-03-25	Female	khassani@syr.edu	315-223-5488	250	550	S
9	9	Ritesh	Dhakkad	Syracuse	USA	1993-08-14	Male	rdhakkad@syr.edu	315-445-3667	300	520	S
10	10	Ananya	Bhupathi	Syracuse	USA	1993-04-17	Female	abhupathi@syr.edu	315-221-4533	300	600	S
11	11	Chris	Adams	Boston	USA	1983-09-27	Male	chadams@gmail.com	617-221-3533	70000	90000	B
12	12	Loki	Ferguson	Boston	USA	1985-04-27	Male	lferguson@gmail.com	617-556-7634	65000	85000	B
13	13	Jazz	Keny	Texas	USA	1993-04-17	Female	jazzkeny@gmail.com	915-554-4533	75000	90000	B
14	14	Luiana	Williams	Maryland	USA	1979-07-07	Female	lwilliams@gmail.com	667-445-6745	75000	100000	B
15	15	Josua	Patterson	Syracuse	USA	1986-02-13	Male	jpatterson@gmail.com	315-445-4699	60000	75000	B
16	16	Jack	Samuel	California	USA	1984-01-13	Male	jacks@gmail.com	315-444-7679	60000	85000	B
17	17	Annie	Hattway	New Y...	USA	1969-10-12	Female	ann@gmail.com	315-544-7779	90000	105000	B
18	18	Harley	Davidson	Colorado	USA	1959-06-21	Female	harldavid@gmail.com	315-484-1979	80000	95000	B
19	19	Jennifer	Aniston	Denver	USA	1967-11-02	Female	jena@gmail.com	315-443-0009	60000	70000	B
20	20	Sean	Sam	Pittsbur...	USA	1984-06-15	Male	sean@gmail.com	315-242-7119	70000	125000	B

-----Insert data in Student table-----

Insert into STUDENT

Values(1,'Syracuse University',24)

Insert into STUDENT

Values(2,'Syracuse University',25)

Insert into STUDENT

Values(3,'Syracuse University',24)

Insert into STUDENT

Values(4,'Syracuse University',24)

Insert into STUDENT

Values(5,'Syracuse University',26)

Insert into STUDENT

Values(6,'Syracuse University',23)

```
Insert into STUDENT  
Values(7,'Syracuse University',23)
```

```
Insert into STUDENT  
Values(8,'Syracuse University',21)
```

```
Insert into STUDENT  
Values(9,'Syracuse University',24)
```

```
Insert into STUDENT  
Values(10,'Syracuse University',24)
```

```
Select * from STUDENT;
```

The screenshot shows a SQL query results window. At the top, there is a text input field containing the query `Select * from STUDENT;`. Below the input field, the results are displayed in a table format. The table has four columns: `UserId`, `UniversityName`, and `Age`. There are 10 rows of data, each corresponding to one of the inserted records. The data is as follows:

	User Id	University Name	Age
1	1	Syracuse University	24
2	2	Syracuse University	25
3	3	Syracuse University	24
4	4	Syracuse University	24
5	5	Syracuse University	26
6	6	Syracuse University	23
7	7	Syracuse University	23
8	8	Syracuse University	21
9	9	Syracuse University	24
10	10	Syracuse University	24

-----Insert in Buyer table-----

```
Insert into Buyer  
Values(11,'1050','2500')
```

```
Insert into Buyer  
Values(12,'1500','3000')
```

```
Insert into Buyer  
Values(13,'2000','3500')
```

```
Insert into Buyer  
Values(14,'3000','3500')
```

```
Insert into Buyer  
Values(15,'2000','3000')
```

```
Insert into Buyer  
Values(16,'1500','3750')
```

```
Insert into Buyer  
Values(17, '2500','3500')
```

```
Insert into Buyer  
Values(18, '1575','2575')
```

```
Insert into Buyer  
Values(19,'2050','3500')
```

```
Insert into Buyer  
Values(20,'2750','3575')
```

```
Select * from Buyer;
```

The screenshot shows a SQL Server Management Studio window. In the query editor, the command `Select * from Buyer;` is typed. Below the editor, the results tab is selected, displaying a table with 10 rows of data. The columns are labeled `Userid`, `MinArea`, and `MaxArea`. The data is as follows:

	Userid	MinArea	MaxArea
1	11	1050	2500
2	12	1500	3000
3	13	2000	3500
4	14	3000	3500
5	15	2000	3000
6	16	1500	3750
7	17	2500	3500
8	18	1575	2575
9	19	2050	3500
10	20	2750	3575

-----Insert data in Feature table-----

```
Insert into Feature  
Values(1,'Parking',2,12)
```

```
Insert into Feature  
Values(2,'Parking',1,15)
```

```
Insert into Feature  
Values(3,'Parking',1,13)
```

```
Insert into Feature  
Values(4,'Parking',2,16)
```

Insert into Feature  
Values(5,'Parking',3,17)

Insert into Feature  
Values(6,'Parking',2,18)

Insert into Feature  
Values(7,'Parking',1,19)

Insert into Feature  
Values(8,'Parking',1,28)

Insert into Feature  
Values(9,'Parking',2,29)

Insert into Feature  
Values(10,'Parking',3,30)

-----Inserting Heating Feature-----

Insert into Feature  
Values  
(11,'Heating',1,1),  
(12,'Heating',1,2),  
(13,'Heating',1,3),  
(14,'Heating',1,4),  
(15,'Heating',1,5),  
(16,'Heating',1,6),  
(17,'Heating',1,7),  
(18,'Heating',1,8),  
(19,'Heating',1,9),  
(20,'Heating',1,10),  
(21,'Heating',1,11),  
(22,'Heating',1,12),  
(23,'Heating',1,13),  
(24,'Heating',1,14),  
(25,'Heating',1,15),  
(26,'Heating',1,16),  
(27,'Heating',1,17),  
(28,'Heating',1,18),  
(29,'Heating',1,19),  
(30,'Heating',1,20),  
(31,'Heating',1,21),  
(32,'Heating',1,22),  
(33,'Heating',1,23),  
(34,'Heating',1,24),  
(35,'Heating',1,25),  
(36,'Heating',1,26),  
(37,'Heating',1,27),  
(38,'Heating',1,28),  
(39,'Heating',1,29),  
(40,'Heating',1,30);

-----Inserting Laundry Feature-----

Insert into Feature

Values

```
(41,'Laundry',3,26),  
(42,'Laundry',3,23),  
(43,'Laundry',3,16),  
(44,'Laundry',3,28),  
(45,'Laundry',3,15),  
(46,'Laundry',2,22),  
(47,'Laundry',2,18),  
(48,'Laundry',2,19),  
(49,'Laundry',2,11),  
(50,'Laundry',3,26),  
(51,'Laundry',3,20),  
(52,'Laundry',2,9),  
(53,'Laundry',2,5),  
(54,'Laundry',2,17),  
(55,'Laundry',1,21),  
(56,'Laundry',1,4),  
(57,'Laundry',1,13);
```

Select \* from Feature;

The screenshot shows a Microsoft SQL Server Management Studio (SSMS) window with the title bar "Select \* from Feature". The results pane displays a table with four columns: FeatureId, FeatureName, Value, and PropertyId. The data consists of 31 rows, each representing a feature entry. The FeatureName column contains values like "Parking", "Heating", and "Laundry". The Value column contains numerical values ranging from 1 to 30. The PropertyId column contains values like 12, 15, 13, etc. The bottom status bar indicates "Query executed successfully." and "ist-s-students.syr.edu (12.... | AD\okmutrej (80) | IST659\_M003\_okmutrej | 00:00:00 | 57 rows".

	FeatureId	FeatureName	Value	PropertyId
1	1	Parking	2	12
2	2	Parking	1	15
3	3	Parking	1	13
4	4	Parking	2	16
5	5	Parking	3	17
6	6	Parking	2	18
7	7	Parking	1	19
8	8	Parking	1	28
9	9	Parking	2	29
10	10	Parking	3	30
11	11	Heating	1	1
12	12	Heating	1	2
13	13	Heating	1	3
14	14	Heating	1	4
15	15	Heating	1	5
16	16	Heating	1	6
17	17	Heating	1	7
18	18	Heating	1	8
19	19	Heating	1	9
20	20	Heating	1	10
21	21	Heating	1	11
22	22	Heating	1	12
23	23	Heating	1	13
24	24	Heating	1	14
25	25	Heating	1	15
26	26	Heating	1	16
27	27	Heating	1	17
28	28	Heating	1	18
29	29	Heating	1	19
30	30	Heating	1	20
31	31	Heating	1	21

-----Insert in FeatureDesc table-----

Insert into FeatureDescription

Values

```
(1,'Parking','Details about whether the apartment has space reserved for parking and if yes how many slots are available'),  
(2,'Heating','Details about the Heating system and of the house and whether the heater is present in the house or not'),  
(3,'Laundry','Details about the Laundry system of the house and the number of laundry units present in that particular house');
```

Select \* from FeatureDescription;

The screenshot shows a SQL query window with the following content:

```
100 % < Select * from FeatureDescription;
```

Results

	FeatureDescId	FeatureName	Description
1	1	Parking	Details about whether the apartment has space re...
2	2	Heating	Details about the Heating system and of the house...
3	3	Laundary	Details about the Laundry system of the house a...

-----Inserting into Display-----

Insert into Display(DisplayId,DisplayDate,Availability,Rent,PropertyId,WebsiteId)

Values

```
(1,'11-25-2017','Y',400,1,1),  
(2,'11-26-2017','Y',450,2,1),  
(3,'11-24-2017','Y',500,3,1),  
(4,'11-28-2017','Y',400,4,1),  
(5,'11-29-2017','N',500,5,1),  
(6,'11-27-2017','Y',400,6,1),  
(7,'11-30-2017','Y',400,7,1),  
(8,'11-25-2017','N',600,8,1),  
(9,'11-26-2017','Y',550,9,1),  
(10,'11-28-2017','Y',520,10,1),  
(11,'11-29-2017','Y',520,21,1),  
(12,'12-03-2017','N',600,22,1),  
(13,'12-04-2017','Y',600,23,1),  
(14,'12-07-2017','Y',450,24,1),  
(15,'12-03-2017','Y',650,25,1),  
(16,'11-26-2017','Y',80000,11,2),  
(17,'11-27-2017','Y',90000,12,2),  
(18,'11-25-2017','Y',75000,13,2),  
(19,'11-28-2017','Y',85000,14,2),  
(20,'11-29-2017','Y',65000,15,2),  
(21,'11-25-2017','N',95000,16,2),  
(22,'11-30-2017','Y',100000,17,2),  
(23,'11-22-2017','Y',85000,18,2),  
(24,'12-06-2017','Y',60000,19,2),  
(25,'12-16-2017','Y',65000,20,2),  
(26,'12-10-2017','Y',58000,26,2),  
(27,'12-08-2017','N',75000,27,2),  
(28,'12-09-2017','Y',88000,28,2),  
(29,'12-13-2017','Y',105000,29,2),  
(30,'12-19-2017','Y',92000,30,2),  
(31,'11-25-2017','Y',385,1,2),  
(32,'11-29-2017','N',450,5,2),
```

```
(33,'11-27-2017','Y',325,6,2),
(34,'11-30-2017','Y',350,7,2),
(35,'11-25-2017','N',500,8,2),
(36,'11-26-2017','Y',475,9,2),
(37,'11-28-2017','Y',430,10,2),
(38,'11-29-2017','Y',440,21,2),
(39,'12-03-2017','N',490,22,2),
(40,'12-04-2017','Y',520,23,2),
(41,'12-03-2017','N',550,22,3),
(42,'12-04-2017','Y',575,23,3),
(43,'12-07-2017','Y',500,24,3),
(44,'12-03-2017','Y',675,25,3),
(45,'11-29-2017','Y',70000,15,3),
(46,'11-25-2017','N',97000,16,3),
(47,'11-30-2017','Y',105000,17,3),
(48,'11-22-2017','Y',89000,18,3),
(49,'12-06-2017','Y',70000,19,3),
(50,'12-16-2017','Y',68000,20,3),
(51,'12-10-2017','Y',58000,26,3),
(52,'12-08-2017','N',75000,27,3)
```

Select \* from Display;

	DisplayId	DisplayDate	Availability	Price	Rent	PropertyId	WebstId
1	1	2017-11-25	Y	NULL	400	1	1
2	2	2017-11-26	Y	NULL	450	2	1
3	3	2017-11-24	Y	NULL	500	3	1
4	4	2017-11-28	Y	NULL	400	4	1
5	5	2017-11-29	N	NULL	500	5	1
6	6	2017-11-27	Y	NULL	400	6	1
7	7	2017-11-30	Y	NULL	400	7	1
8	8	2017-11-25	N	NULL	600	8	1
9	9	2017-11-26	Y	NULL	550	9	1
10	10	2017-11-28	Y	NULL	520	10	1
11	11	2017-11-29	Y	NULL	520	21	1
12	12	2017-12-03	N	NULL	600	22	1
13	13	2017-12-04	Y	NULL	600	23	1
14	14	2017-12-07	Y	NULL	450	24	1
15	15	2017-12-03	Y	NULL	650	25	1
16	16	2017-11-26	Y	800...	N...	11	2
17	17	2017-11-27	Y	900...	N...	12	2
18	18	2017-11-25	Y	750...	N...	13	2
19	19	2017-11-28	Y	850...	N...	14	2
20	20	2017-11-29	Y	650...	N...	15	2
21	21	2017-11-25	N	950...	N...	16	2
22	22	2017-11-30	Y	100...	N...	17	2
23	23	2017-11-22	Y	850...	N...	18	2
24	24	2017-12-06	Y	600...	N...	19	2
25	25	2017-12-16	Y	650...	N...	20	2
26	26	2017-12-10	Y	580...	N...	26	2
27	27	2017-12-08	N	750...	N...	27	2
28	28	2017-12-06	Y	800...	N...	28	2

-----Insert data in Review table-----

Insert into Review

Values (1,'2','unhygenic house, not cooperative landlord','1','1')

Insert into Review

Values (2,'3','decent house, not cooperative landlord','2','2')

Insert into Review

Values (3,'4','nice house, cooperative landlord','2','3')

Insert into Review

Values (4,'3','lot of robbery','3','4')

Insert into Review

Values (5,'4','good house, cooperative landlord','1','5')

Insert into Review

Values (6,'3.5','decent house, cooperative landlord, bad heater','3','6')

Insert into Review

Values (7,'4.5','good house','2','7')

Insert into Review

Values (8,'4.5','good house, cooperative landlord','2','8')

Insert into Review

Values (9,'2.5','decent house, not good neighbourhood','1','9')

Insert into Review

Values (10,'4','good house, near to university','3','10')

Insert into Review

Values (11,'4','good house, near to market','2','11')

Insert into Review

Values (12,'5','good house, near to university, cooperative landlord','2','12')

Insert into Review

Values (13,'4.5','recently renovated good house','3','13')

Insert into Review

Values (14,'3.8','good house','1','14')

Insert into Review

Values (15,'3.5',' issues with heater, rest good house','1','15')

Insert into Review

Values (16,'4.2','beautiful house','2','16')

Insert into Review

Values (17,'4',' parking issues, rest good house','3','17')

Insert into Review

Values (18,'3.8',' not so friendly neighborhood, rest good house','2','18')

Insert into Review

Values (19,'4',' good house','3','19')

Insert into Review

Values (20,'4',' decent house','1','20')

Insert into Review

Values (21,'4.5','beautiful house with good heating system','2','21')

Insert into Review

Values (22,'4.8','good neighborhood, near to the university, helpful landlord','2','22')

Insert into Review

Values (23,'3.5','ok ok house','3','23')

Insert into Review

Values (24,'3','average house','1', and '24')

Insert into Review

Values (25,'2.8','bad house','1','25')

Insert into Review

Values (26,'3.5','beautiful house with few instances of robbery','2','26')

Insert into Review

Values (27,'4.3','great house with good locality','2','27')

Insert into Review

Values (28,'2.7','creepy house','1','28')

Insert into Review

Values (29,'3.3','parking is an issue','3','29')

Insert into Review

Values (30,'2.5','not good neighbourhood','1','30')

Select \* from Review;

Select * from Review;				
ReviewId	Rating	Comments	WebsiteId	PropertyId
1	2.00	unhygenic house, not cooperative landlord	1	1
2	3.00	decent house, not cooperative landlord	2	2
3	4.00	nice house, cooperative landlord	2	3
4	3.00	lot of robbery	3	4
5	4.00	good house, cooperative landlord	1	5
6	3.50	decent house, cooperative landlord, bad heater	3	6
7	4.50	good house	2	7
8	4.50	good house, cooperative landlord	2	8
9	2.50	decent house, not good neighbourhood	1	9
10	4.00	good house, near to university	3	10
11	4.00	good house, near to market	2	11
12	5.00	good house, near to university, cooperative land...	2	12
13	4.50	recently renovated good house	3	13
14	3.80	good house	1	14
15	3.50	issues with heater, rest good house	1	15
16	4.20	beautiful house	2	16
17	4.00	parking issues, rest good house	3	17
18	3.80	not so friendly neighbourhood, rest good house	2	18
19	4.00	good house	3	19
20	4.00	decent house	1	20
21	4.50	beautiful house with good heating system	2	21
22	4.80	good neighbourhood, near to the university, hel...	2	22
23	3.50	ok ok house	3	23
24	3.00	average house	1	24
25	2.80	bad house	1	25
26	3.50	beautiful house with few instances of robbery	2	26

Query executed successfully.

ist-s-students.syr.edu (12...) | AD\okmutrej (80) | IST659\_M003\_okmutrej | 00:00:00 | 30 rows

## MAJOR DATA QUESTIONS

---What percentage of users are students and buyers----

```
Select CASE when UserType='B' then 'Buyer' else 'Student' END 'UserType',
(count(UserId)*100/(Select count(*) from Users)) 'Percentage' from Users
group by CASE when UserType='B' then 'Buyer' else 'Student' END
```

The screenshot shows the SQL Server Management Studio interface. The query window contains the following code:

```
--What percentage of users are students and buyers---
Select CASE when UserType='B' then 'Buyer' else 'Student' END 'UserType',
(count(UserId)*100/(Select count(*) from Users)) 'Percentage' from Users
group by CASE when UserType='B' then 'Buyer' else 'Student' END
```

The results pane displays a table with two rows:

	UserType	Percentage
1	Buyer	50
2	Student	50

---What percentage of Users are male and female----

```
Select Gender,CASE when UserType='B' then 'Buyer' else 'Student' END 'UserType',
(count(UserID)*100/(Select count(*) from Users)) 'Percentage' from Users
group by CASE when UserType='B' then 'Buyer' else 'Student' END, Gender
```

The screenshot shows the SQL Server Management Studio interface. The query window contains the following code:

```
--What percentage of Users are male and female---
Select Gender,CASE when UserType='B' then 'Buyer' else 'Student' END 'UserType',
(count(UserID)*100/(Select count(*) from Users)) 'Percentage' from Users
group by CASE when UserType='B' then 'Buyer' else 'Student' END, Gender
```

The results pane displays a table with four rows:

	Gender	UserType	Percentage
1	Female	Buyer	25
2	Female	Student	30
3	Male	Buyer	25
4	Male	Student	20

----What is the age range of students----

```
Select Age, (count(UserID)*100/(select count(*) from Student)) 'Percentage' from Student
group by age
```

```
--What is the age range of students--  
Select Age, (count(UserID)*100/(select count(*) from Student)) 'Percentage' from Student  
group by age
```

100 %

	Age	Percentage
1	21	10
2	23	20
3	24	50
4	25	10
5	26	10

-----• What percentage of properties does each website display?-----

```
Select D.WebsiteId, W.WebsiteName, count(D.PropertyId) AS 'Count',  
(count(D.PropertyId)*100/(Select count(*) from Display)) 'Percentage' from Display D, RetailWebsite W  
where D.WebsiteId=W.WebsiteId  
group by D.WebsiteId, W.WebsiteName  
--having count(D.PropertyId) >= ALL (Select count(*) from Display group by WebsiteId)
```

```
-----• What percentage of properties does each website display?-----  
Select D.WebsiteId, W.WebsiteName, count(D.PropertyId) AS 'Count',  
(count(D.PropertyId)*100/(Select count(*) from Display)) 'Percentage' from Display D, RetailWebsite W  
where D.WebsiteId=W.WebsiteId  
group by D.WebsiteId, W.WebsiteName  
--having count(D.PropertyId) >= ALL (Select count(*) from Display group by WebsiteId)
```

100 %

	WebsiteId	WebsiteName	Count	Percentage
1	1	Orange Housing	15	28
2	2	Zillow	25	48
3	3	Syracuse Quality Living	12	23

-----What is the average rating of each website-----

```
Select RW.WebsiteId, RW.WebsiteName, AVG(R.Rating) 'Average Rating' from RetailWebsite RW, Review R, Display D  
where RW.WebsiteId=D.WebsiteId  
and RW.WebsiteId=R.WebsiteId  
group by RW.WebsiteId, RW.WebsiteName  
order by AVG(R.Rating) desc
```

```
--What is the average rating of each website-----
Select RW.WebsiteId, RW.WebsiteName, AVG(R.Rating) 'Average Rating' from RetailWebsite RW, Review R.Display D
where RW.WebsiteId=D.WebsiteId
and RW.WebsiteId=R.WebsiteId
group by RW.WebsiteId, RW.WebsiteName
order by AVG(R.Rating) desc
```

100 % <

	Websiteld	WebsiteName	Average Rating
1	2	Zillow	4.175000
2	3	Syracuse Quality Living	3.725000
3	1	Orange Housing	3.080000

--What percentage of property is for renting and buying-----

```
Select CASE when PropertyType='R' then 'RentalProperty' else 'Property for Sale' END,
(count(PropertyId)*100/(Select count(*) from Property)) 'Percentage' from Property
group by PropertyType
```

```
--What percentage of property is for renting and buying-----
Select CASE when PropertyType='R' then 'RentalProperty' else 'Property for Sale' END,
(count(PropertyId)*100/(Select count(*) from Property)) 'Percentage' from Property
group by PropertyType
```

100 % <

	(No column name)	Percentage
1	RentalProperty	50
2	Property for Sale	50

-----What are the total number of rental properties in different rent range-?

```
--select min (Rent), max (Rent), min (Price), max (Price) from Display
Select
(CASE when Rent between 325 and 425 then 'Affordable 325 to 425'
when Rent between 425 and 525 then 'Moderate 425 to 525'
when Rent between 525 and 675 then 'Expensive 525 to 675'
ELSE 'NA' END) AS 'Rent_Range', count(P.PropertyId) 'Total Rental Properties'
from Display D, Property P
where D.PropertyId=P.PropertyId
and P.PropertyType='R'
group by (CASE when Rent between 325 and 425 then 'Affordable 325 to 425'
when Rent between 425 and 525 then 'Moderate 425 to 525'
when Rent between 525 and 675 then 'Expensive 525 to 675'
ELSE 'NA' END)
```

```
--What are the total number of rental properties in different rent range--  
--select min(Rent),max(Rent),min(Price),max(Price) from Display  
Select  
(CASE when Rent between 325 and 425 then 'Affordable 325 to 425'  
when Rent between 425 and 525 then 'Moderate 425 to 525'  
when Rent between 525 and 675 then 'Expensive 525 to 675'  
ELSE 'NA' END) AS 'Rent_Range', count(P.PropertyId) 'Total Rental Properties'  
from Display D, Property P  
where D.PropertyId=P.PropertyId  
and P.PropertyType='R'  
group by (CASE when Rent between 325 and 425 then 'Affordable 325 to 425'  
when Rent between 425 and 525 then 'Moderate 425 to 525'  
when Rent between 525 and 675 then 'Expensive 525 to 675'  
ELSE 'NA' END)  
  
-----CASE - Sale Properties-----  
100 % <-->  


| Rent_Range            | Total Rental Properties |
|-----------------------|-------------------------|
| Affordable 325 to 425 | 7                       |
| Expensive 525 to 675  | 8                       |
| Moderate 425 to 525   | 14                      |


```

-----What are the total number of sale properties in different price range-----

```
Select  
(CASE when Price between 58000 and 70000 then 'Affordable 58000 to 70000'  
when Price between 70000 and 90000 then 'Moderate 70000 to 90000'  
when Price between 90000 and 105000 then 'Expensive 90000 to 105000'  
ELSE 'NA' END) AS 'Price_Range', count(P.PropertyId) 'Total Sale Properties'  
from Display D, Property P  
where D.PropertyId=P.PropertyId  
and P.PropertyType='S'  
group by (CASE when Price between 58000 and 70000 then 'Affordable 58000 to 70000'  
when Price between 70000 and 90000 then 'Moderate 70000 to 90000'  
when Price between 90000 and 105000 then 'Expensive 90000 to 105000'  
ELSE 'NA' END)
```

```
--What are the total number of sale properties in different price range-----
Select
(CASE when Price between 58000 and 70000 then 'Affordable 58000 to 70000'
when Price between 70000 and 90000 then 'Moderate 70000 to 90000'
when Price between 90000 and 105000 then 'Expensive 90000 to 105000'
ELSE 'NA' END) AS 'Price_Range', count(P.PropertyId) 'Total Sale Properties'
from Display D, Property P
where D.PropertyId=P.PropertyId
and P.PropertyType='S'
group by (CASE when Price between 58000 and 70000 then 'Affordable 58000 to 70000'
when Price between 70000 and 90000 then 'Moderate 70000 to 90000'
when Price between 90000 and 105000 then 'Expensive 90000 to 105000'
ELSE 'NA' END)

----Which is most expensive expensive Rental property and Property for Sale in the entire database-----
100 % < Results Messages


| Price_Range               | Total Sale Properties |
|---------------------------|-----------------------|
| Affordable 58000 to 70000 | 8                     |
| Expensive 90000 to 105000 | 6                     |
| Moderate 70000 to 90000   | 9                     |


```

---Which is most expensive Rental property and Property for Sale in the entire database-----

```
Select distinct R.WebsiteName,P.PlotNumber,P.StreetName,CASE when PropertyType='S' then 'Property for Sale' else
'Rental Property' END As '.PropertyType',
D.Price,D.Rent from Property P, Display D, RetailWebsite R
where P.PropertyId=D.PropertyId
and D.WebsiteId=R.WebsiteId
--and P.PropertyType='S'
group by R.WebsiteName,P.PlotNumber,P.StreetName,D.Price,D.Rent,CASE when PropertyType='S' then 'Property for
Sale' else 'Rental Property' END
having D.Price >= ALL (Select D.Price from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='S'
group by Price)
OR D.Rent >= ALL (Select D.Rent from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='R'
group by Rent)
```

```
--Which is most expensive expensive Rental property and Property for Sale in the entire database-----
Select distinct R.WebsiteName,P.PlotNumber,P.StreetName,CASE when PropertyType='S' then 'Property for Sale' else 'Rental Property' END As '.PropertyType',
D.Price,D.Rent from Property P, Display D, RetailWebsite R
where P.PropertyId=D.PropertyId
and D.WebsiteId=R.WebsiteId
--and P.PropertyType='S'
group by R.WebsiteName,P.PlotNumber,P.StreetName,D.Price,D.Rent,CASE when PropertyType='S' then 'Property for Sale' else 'Rental Property' END
having D.Price >= ALL (Select D.Price from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='S' group by Price)
OR D.Rent >= ALL (Select D.Rent from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='R' group by Rent)
--order by D.Price desc

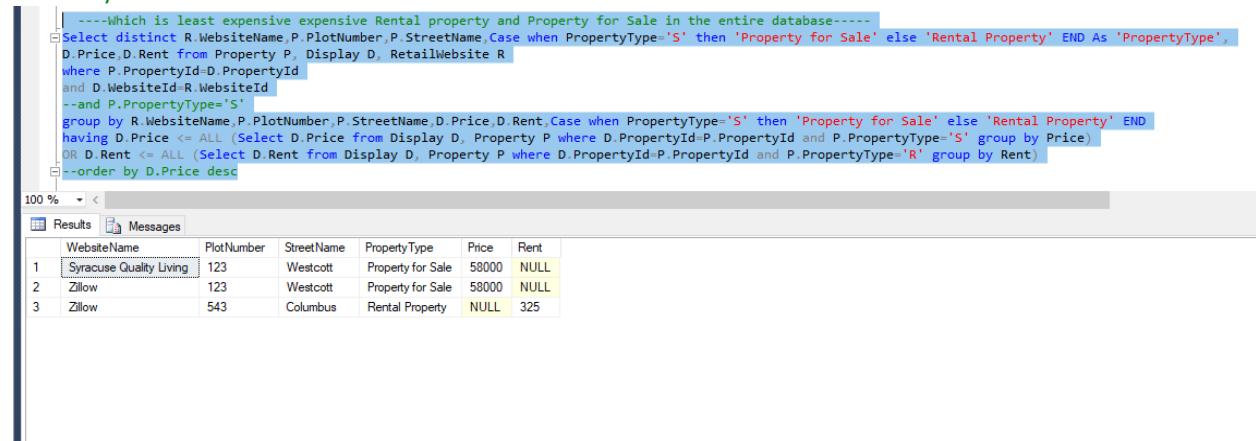
----Which is least expensive expensive Rental property and Property for Sale in the entire database-----
Select distinct R.WebsiteName,P.PlotNumber,P.StreetName,CASE when PropertyType='S' then 'Property for Sale' else 'Rental Property' END As '.PropertyType'.
100 % < Results Messages


| WebsiteName             | PlotNumber | StreetName | PropertyParams    | Price  | Rent |
|-------------------------|------------|------------|-------------------|--------|------|
| Syracuse Quality Living | 43         | Basset     | Rental Property   | NULL   | 675  |
| Syracuse Quality Living | 420        | Westcott   | Property for Sale | 105000 | NULL |
| Zillow                  | 803        | Ackerman   | Property for Sale | 105000 | NULL |


```

----Which is least expensive expensive Rental property and Property for Sale in the entire database-----

```
Select distinct R.WebsiteName,P.PlotNumber,P.StreetName,Case when PropertyType='S' then 'Property for Sale' else
'Rental Property' END As 'PropertyType',
D.Price,D.Rent from Property P, Display D, RetailWebsite R
where P.PropertyId=D.PropertyId
and D.WebsiteId=R.WebsiteId
--and P.PropertyType='S'
group by R.WebsiteName,P.PlotNumber,P.StreetName,D.Price,D.Rent,Case when PropertyType='S' then 'Property for
Sale' else 'Rental Property' END
having D.Price <= ALL (Select D.Price from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='S'
group by Price)
OR D.Rent <= ALL (Select D.Rent from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='R'
group by Rent)
--order by D.Price desc
```



```
--Which is least expensive expensive Rental property and Property for Sale in the entire database-----
Select distinct R.WebsiteName,P.PlotNumber,P.StreetName,Case when PropertyType='S' then 'Property for Sale' else 'Rental Property' END As 'PropertyType',
D.Price,D.Rent from Property P, Display D, RetailWebsite R
where P.PropertyId=D.PropertyId
and D.WebsiteId=R.WebsiteId
--and P.PropertyType='S'
group by R.WebsiteName,P.PlotNumber,P.StreetName,D.Price,D.Rent,Case when PropertyType='S' then 'Property for Sale' else 'Rental Property' END
having D.Price <= ALL (Select D.Price from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='S' group by Price)
OR D.Rent <= ALL (Select D.Rent from Display D, Property P where D.PropertyId=P.PropertyId and P.PropertyType='R' group by Rent)
--order by D.Price desc
```

	WebsiteName	PlotNumber	StreetName	PropertyType	Price	Rent
1	Syracuse Quality Living	123	Westcott	Property for Sale	58000	NULL
2	Zillow	123	Westcott	Property for Sale	58000	NULL
3	Zillow	543	Columbus	Rental Property	NULL	325

-----What is the street wise rating of different Rental properties and how many rental properties are there on a single street-----

```
Select P.StreetName,AVG(R.Rating) 'Rating', count(P.PropertyId) 'Total Number of Rental Apartments'
from Property P, Feature F, Review R
where P.PropertyId=F.PropertyId
and R.PropertyId=P.PropertyId
and P.PropertyType='R'
group by P.StreetName
order by AVG(R.Rating) desc
```

```
--What is the street wise rating of different properties and how many properties are there on a single street-----  
Select P.StreetName, AVG(R.Rating) 'Rating', count(P.PropertyId) 'Total Number of Rental Apartments'  
from Property P, Feature F, Review R  
where P.PropertyId=F.PropertyId  
and R.PropertyId=P.PropertyId  
and P.PropertyType='R'  
group by P.StreetName  
order by AVG(R.Rating) desc
```

100 % <

	StreetName	Rating	Total Number of Rental Apartments
1	Westcott	4.442857	7
2	Clarendon	4.000000	1
3	Columbus	4.000000	2
4	Ackerman	3.666666	3
5	Lancaster	3.000000	2
6	Basset	2.900000	2
7	Lexington	2.500000	2
8	South Beech	2.500000	2

-----What is the street wise rating of different Sale properties and how many Sale properties are there on a single street-----

```
Select P.StreetName, AVG(R.Rating) 'Rating', count(P.PropertyId) 'Total Number of Sale Apartments'  
from Property P, Feature F, Review R  
where P.PropertyId=F.PropertyId  
and R.PropertyId=P.PropertyId  
and P.PropertyType='S'  
group by P.StreetName  
order by AVG(R.Rating) desc
```

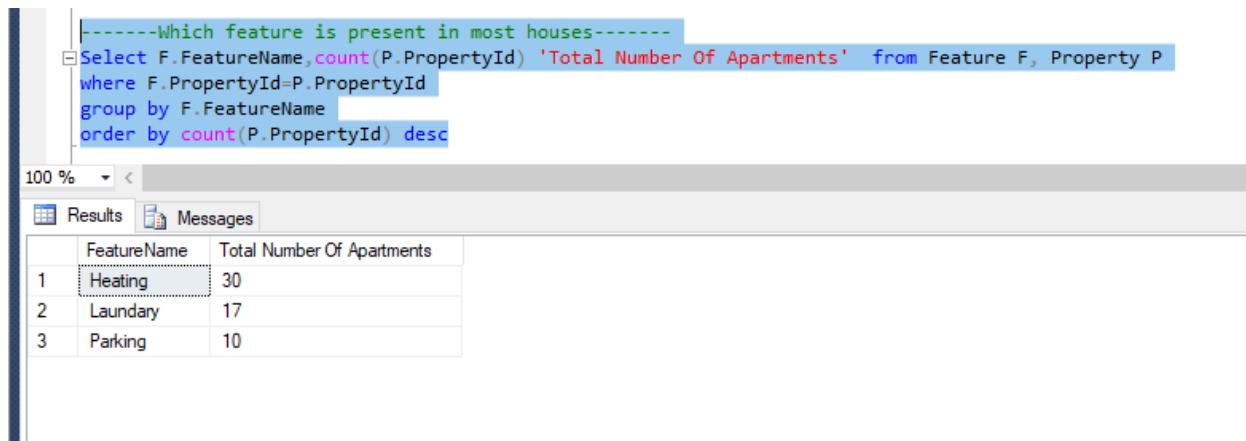
```
--What is the street wise rating of different Sale properties and how many Sale properties are there on a single street-----  
Select P.StreetName, AVG(R.Rating) 'Rating', count(P.PropertyId) 'Total Number of Sale Apartments'  
from Property P, Feature F, Review R  
where P.PropertyId=F.PropertyId  
and R.PropertyId=P.PropertyId  
and P.PropertyType='S'  
group by P.StreetName  
order by AVG(R.Rating) desc
```

100 % <

	StreetName	Rating	Total Number of Sale Apartments
1	Clarendon	4.500000	3
2	Westcott	3.972000	25
3	Lancaster	3.800000	1
4	Ackerman	3.300000	2
5	Basset	2.700000	3
6	Lexington	2.500000	2

-----Which feature is present in most houses-----

```
Select F.FeatureName, count(P.PropertyId) 'Total Number Of Apartments' from Feature F, Property P  
where F.PropertyId=P.PropertyId  
group by F.FeatureName  
order by count(P.PropertyId) desc
```



-----Which feature is present in most houses-----

```
Select F.FeatureName, count(P.PropertyId) 'Total Number Of Apartments' from Feature F, Property P
where F.PropertyId=P.PropertyId
group by F.FeatureName
order by count(P.PropertyId) desc
```

Results

	FeatureName	Total Number Of Apartments
1	Heating	30
2	Laundary	17
3	Parking	10

----What are the total number of distinct features present in all the properties

```
Select P.PlotNumber,P.StreetName,count(distinct FeatureName) 'Distinct Feature Count'
from Feature F, Property P
where F.PropertyId=P.PropertyId
group by P.PlotNumber,P.StreetName
order by count(distinct FeatureName) desc
```

```
----What are the total number of distinct features present in all the properties -----
Select P.PlotNumber, P.StreetName, count(distinct FeatureName) 'Distinct Feature Count'
from Feature F, Property P
where F.PropertyId=P.PropertyId
group by P.PlotNumber, P.StreetName
order by count(distinct FeatureName) desc
```

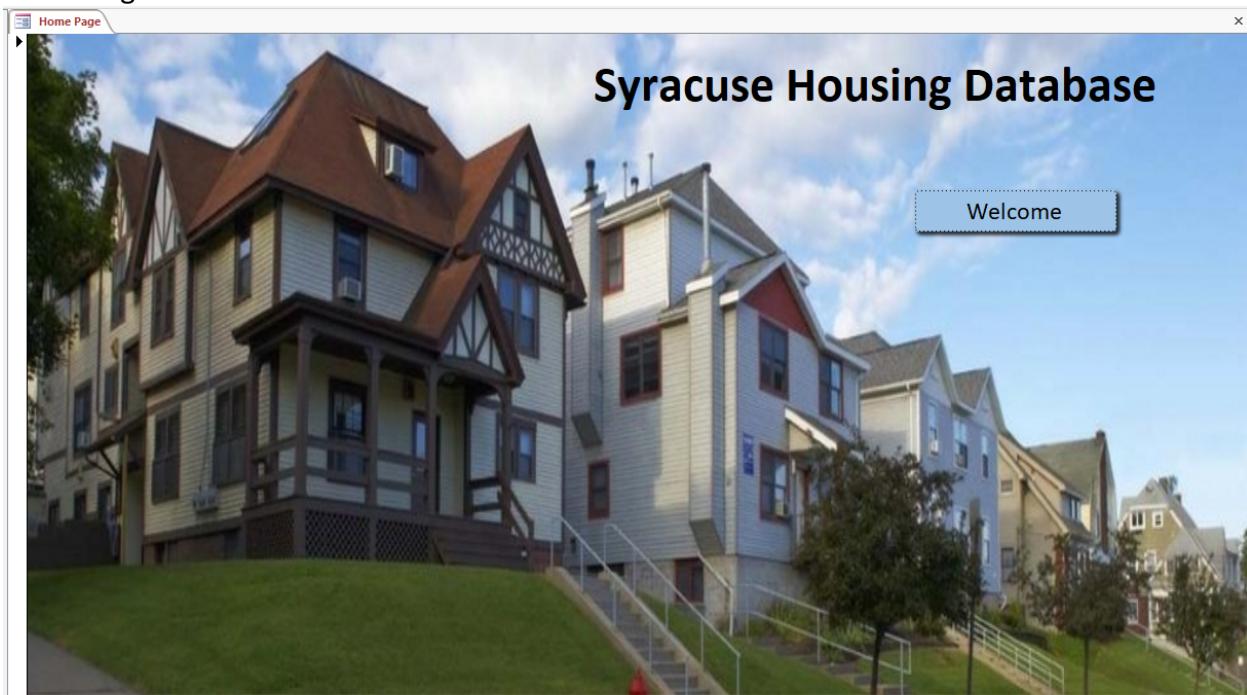
Results Messages

PlotNumber	StreetName	Distinct Feature Count
1	Basset	3
2	Clarendon	3
3	Westcott	3
4	Westcott	3
5	Westcott	3
6	Westcott	3
7	Westcott	3
8	Westcott	2
9	Westcott	2
10	Westcott	2
11	Westcott	2
12	Westcott	2
13	Ackerman	2
14	Ackerman	2
15	Lexington	2
16	Lexington	2

Query executed successfully. | ist-s-students.syr.edu (12.... | AD\okmutrej (90) | IST659\_M003\_okmutrej | 00:00:00 | 30 rows

# Interfaces

Home Page:



Login Page:

---

## Login



[Enter as Admin](#)

[Enter as User](#)

---

When you enter as a User:

## Users

[Back](#)

[Students](#)      [Buyers](#)

When you enter as Students:

## Rental Properties

[Back](#)

Street Name

[All Rental Properties](#)      [View Landlords](#)

When you choose a street name from the drop down menu:

## Rental Properties

**Street Name**

[Back](#)



[All Rental Properties](#)

[View Landlords](#)

When you hit the button besides the drop down menu:

StreetName	Websiteld	WebsiteNa	DisplayDate	Availability	Expr1005	PropertyId	PlotNumber	FloorNumber	Zip	TotalArea	PropertyBui	Feat
Westcott	1	Orange Housin	2017-11-25	N	600	8	620	2	13210	1200	1936-01-01	
Westcott	1	Orange Housin	2017-11-29	N	500	5	440	2	13210	1300	1948-01-01	
Westcott	1	Orange Housin	2017-11-29	N	500	5	440	2	13210	1300	1948-01-01	
Westcott	1	Orange Housin	2017-11-29	Y	520	21	870	2	13210	1080	1998-05-04	
Westcott	1	Orange Housin	2017-11-29	Y	520	21	870	2	13210	1080	1998-05-04	
Westcott	1	Orange Housin	2017-12-03	N	600	22	333	3	13210	1880	1999-04-04	
Westcott	1	Orange Housin	2017-12-03	N	600	22	333	3	13210	1880	1999-04-04	
Westcott	2	Zillow	2017-11-25	N	500	8	620	2	13210	1200	1936-01-01	
Westcott	2	Zillow	2017-11-29	N	450	5	440	2	13210	1300	1948-01-01	
Westcott	2	Zillow	2017-11-29	N	450	5	440	2	13210	1300	1948-01-01	
Westcott	2	Zillow	2017-11-29	Y	440	21	870	2	13210	1080	1998-05-04	
Westcott	2	Zillow	2017-11-29	Y	440	21	870	2	13210	1080	1998-05-04	
Westcott	2	Zillow	2017-12-03	N	490	22	333	3	13210	1880	1999-04-04	
Westcott	2	Zillow	2017-12-03	N	490	22	333	3	13210	1880	1999-04-04	
Westcott	3	Syracuse Quali	2017-12-03	N	550	22	333	3	13210	1880	1999-04-04	
Westcott	3	Syracuse Quali	2017-12-03	N	550	22	333	3	13210	1880	1999-04-04	

When you click on View Landlords:

## Landlord

**LandlordId**

[Back](#)

**FName**

**LName**

**Email**

**Contact**

[◀](#)
[▶](#)

When you enter as Buyers:

## Property For Sale

[Back](#)

**StreetName**

▼

**Run Query**



**All Properties for Sale**

When you select a street from the drop down menu and hit the Run Query button

StreetName	WebsiteId	WebsiteName	DisplayDate	Availability	PropertyId	PlotNumber	FloorNumber	Zip	TotalArea	PropertyBuilt	FeatureId	FeatureName
Lancaster	2	Zillow	2017-11-28	Y	14	1090	2	13210	500	2007-05-04	24	Heating

Entering as an Admin:

**Admin Login**

Username

Password

On entering the wrong Username or password:

**Admin Login**

Username

Password

Microsoft Access X

Incorrect Credentials

On entering the correct Username and password:

## Admin Login

Username

Omkar

Password

Microsoft Access X

\*\*\*

Welcome

OK

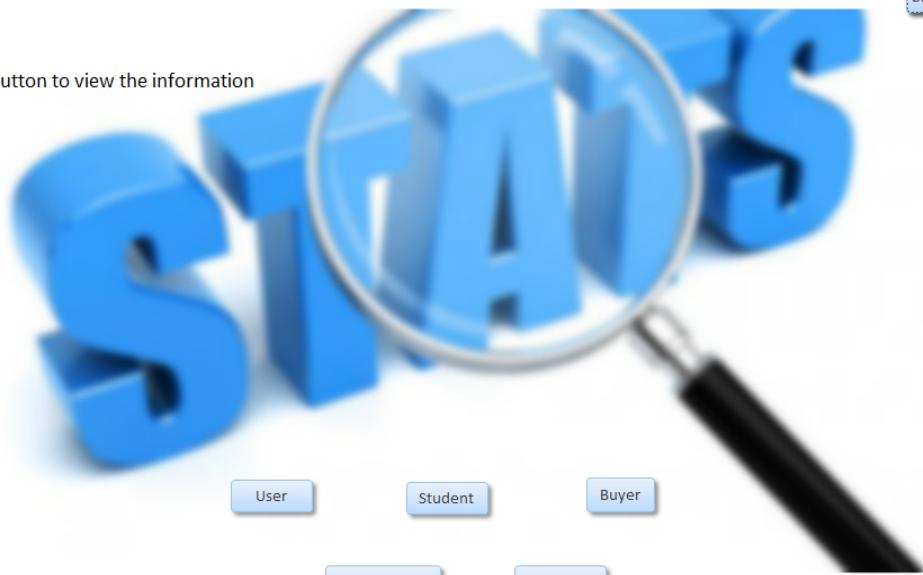
Login

On clicking on OK:

Welcome

Back

Click the button to view the information



User

Student

Buyer

Retail Website

Property

On clicking on User :

Hit the button to know the answer !

[Back](#)

Want to know the percentage of Users as Students and Buyers [Click here](#)

Sex ratio of Users is [Here](#)

On clicking on Student:

Hit the button to know the answer !

[Back](#)

Sex ratio of Students is [here](#)

Want to know Age range for student ? [Hit me !](#) [Visualized Age range](#)

On clicking on Buyer:

Hit the button to know the answer !

Back

Sex ratio of Buyers is [here](#)

On clicking on Retail Website

Hit the button to know the answer !

Back

Website Ratings 

Number of properties on each website 

On clicking on Website Ratings:

WebsiteId	WebsiteName	AvgRating
2	Zillow	4.175
3	Syracuse Quality Living	3.725
1	Orange Housing	3.08

On clicking on Property:

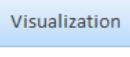
Hit the button to know the answer !

Back

Street name with count of property 

Street Rating 

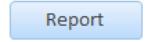
What percentage of property is for renting and buying ? 

 Visualization

High valued Property 

Least Expensive Property 

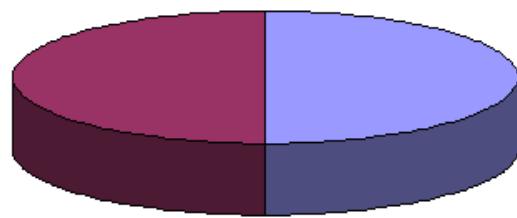
Feature present in most of the property 

 Report

On clicking on Visualization button from the above screenshot:

Back

percentage of property is for renting and buying



\*R ~ Property for rent -50%

S ~ Property for sale -50%

# Reports

## Rental Properties:

Rental Properties																	
PropertyId	WebsiteId	WebsiteName	DisplayDate	Availability	PlotNumber	FloorNumber	StreetName	Zip	TotalArea	PropertyBuiltDate	FeatureId	FeatureName	Value	LandlordId	FName	LName	Er
1	1	Orange Housir	2017-11-25	Y	710	1	South Beech	13210	1000	1910-01-01	11	Heating	1	1	Becky	Xin	b
1	2	Zillow	2017-11-25	Y	710	1	South Beech	13210	1000	1910-01-01	11	Heating	1	1	Becky	Xin	b
2	1	Orange Housir	2017-11-26	Y	716	1	South Beech	13210	1500	1903-01-01	12	Heating	1	2	Dave	Hornstein	d
3	1	Orange Housir	2017-11-24	Y	514	2	Clarendon	13210	1250	1990-01-01	13	Heating	1	3	Joan	Grant	jg
4	1	Orange Housir	2017-11-28	Y	1021	2	Lancaster	13210	1050	1965-01-01	14	Heating	1	4	Brad	Stalter	b
4	1	Orange Housir	2017-11-28	Y	1021	2	Lancaster	13210	1050	1965-01-01	56	Laundry	1	4	Brad	Stalter	b
5	1	Orange Housir	2017-11-29	N	440	2	Westcott	13210	1300	1948-01-01	15	Heating	1	5	Stacy	Romano	s
5	1	Orange Housir	2017-11-29	N	440	2	Westcott	13210	1300	1948-01-01	53	Laundry	2	5	Stacy	Romano	s
5	2	Zillow	2017-11-29	N	440	2	Westcott	13210	1300	1948-01-01	15	Heating	1	5	Stacy	Romano	s
5	2	Zillow	2017-11-29	N	440	2	Westcott	13210	1300	1948-01-01	53	Laundry	2	5	Stacy	Romano	s
6	2	Zillow	2017-11-27	Y	543	1	Columbus	13210	800	1969-01-01	16	Heating	1	6	Azan	Hosein	a
6	1	Orange Housir	2017-11-27	Y	543	1	Columbus	13210	800	1969-01-01	16	Heating	1	6	Azan	Hosein	a

## Property for Sale:

All Properties For Sale																	
PropertyId	WebsiteId	WebsiteName	DisplayDate	Availability	PlotNumber	FloorNumber	StreetName	Zip	TotalArea	PropertyBuiltDate	FeatureId	FeatureName	Value	LandlordId	FName	LName	Er
11	2	Zillow	2017-11-26	Y	700	1	Westcott	13210	1570	1910-01-01	21	Heating	1	1	Eli	Eliezer	e
11	2	Zillow	2017-11-26	Y	700	1	Westcott	13210	1570	1910-01-01	49	Laundry	2	1	Eli	Eliezer	e
12	2	Zillow	2017-11-27	Y	111	3	Westcott	13210	1070	1980-01-01	1	Parking	2	2	Ivan	Isaac	i
12	2	Zillow	2017-11-27	Y	111	3	Westcott	13210	1070	1980-01-01	22	Heating	1	2	Ivan	Isaac	i
13	2	Zillow	2017-11-25	Y	490	2	Clarendon	13210	800	2005-05-04	3	Parking	1	3	Jacob	Jacobson	j
13	2	Zillow	2017-11-25	Y	490	2	Clarendon	13210	800	2005-05-04	23	Heating	1	3	Jacob	Jacobson	j
13	2	Zillow	2017-11-25	Y	490	2	Clarendon	13210	800	2005-05-04	57	Laundry	1	3	Jacob	Jacobson	j
14	2	Zillow	2017-11-28	Y	1090	2	Lancaster	13210	500	2007-05-04	24	Heating	1	4	Elie	Eliezer	e
15	2	Zillow	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	2	Parking	1	5	Sarah	Sarah	s
15	2	Zillow	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	25	Heating	1	5	Sarah	Sarah	s
15	2	Zillow	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	45	Laundry	3	5	Sarah	Sarah	s
15	3	Syracuse Qual	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	2	Parking	1	5	Sarah	Sarah	s
15	3	Syracuse Qual	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	25	Heating	1	5	Sarah	Sarah	s
15	3	Syracuse Qual	2017-11-29	Y	220	1	Westcott	13210	2000	1880-05-04	45	Laundry	3	5	Sarah	Sarah	s
16	3	Syracuse Qual	2017-11-25	N	320	1	Westcott	13210	2050	1890-05-04	4	Parking	2	6	Abraham	Abraham	a
16	3	Syracuse Qual	2017-11-25	N	320	1	Westcott	13210	2050	1890-05-04	26	Heating	1	6	Abraham	Abraham	a
16	3	Syracuse Qual	2017-11-25	N	320	1	Westcott	13210	2050	1890-05-04	43	Laundry	3	6	Abraham	Abraham	a
16	2	Zillow	2017-11-25	N	320	1	Westcott	13210	2050	1890-05-04	4	Parking	2	6	Abraham	Abraham	a

# Additional Information

## **1) Why did you put the Administrator Login?**

We have put the administrator login for security purposes. However, we felt the need that at times the administrator just wants to look at the statistics of the data to analyze the dataset, hence we put the administrator login. We wanted to create a portal wherein the administrator can view the data and get important trends and insights from the database along with adding, deleting and updating the data as and when required.