LAB 3

CREATE table vendor (TIN varchar(20) primary key , name varchar(20) , address varchar(30), contact bigint);

[alter](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) vendor add place varchar(20) AFTER address;

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [user](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/information-functions.html%23function_user) (user\_id varchar(20) primary key , house\_no varchar(20) , address varchar(30), place varchar(30) , solar\_usage varchar(20));

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) solar\_panel (pv\_id varchar(20) primary key , price int , warranty int, capacity varchar(30));

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) sell (TIN varchar(20) , FOREIGN KEY (TIN) REFERENCES vendor(TIN), pv\_id varchar(20) , FOREIGN KEY (pv\_id) REFERENCES solar\_panel(pv\_id), PRIMARY KEY(TIN , pv\_id));

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) purchase (user\_id varchar(20) , FOREIGN KEY (user\_id) REFERENCES [user](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/information-functions.html%23function_user)(user\_id), pv\_id varchar(20) , FOREIGN KEY (pv\_id) REFERENCES solar\_panel(pv\_id), PRIMARY KEY(user\_id , pv\_id));

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) install\_panel (TIN varchar(20) , FOREIGN KEY (TIN) REFERENCES vendor(TIN),user\_id varchar(20) , FOREIGN KEY (user\_id) REFERENCES [user](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/information-functions.html%23function_user)(user\_id), pv\_id varchar(20) , FOREIGN KEY (pv\_id) REFERENCES solar\_panel(pv\_id), date date,type varchar(30),PRIMARY KEY(TIN,user\_id , pv\_id));

[alter](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) solar\_panel drop column capacity;

[alter](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) install\_panel add capacity int;

INSERTION

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into vendor [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)

('v\_01' , 'SRS Solar' , 'Bangalore' , 'vijaynagara' , 9874585632),

('v\_02' , 'Adishwar Solar' , 'Bangalore' , 'vijaynagara' , 9874585632),

('v\_03' , 'echo Solar' , 'Bangalore' , 'nagarbhavi' , 8745896585),

('v\_04' , 'solarify Solar' , 'Bangalore' , 'sunkadakatte' , 7985412301),

('v\_05' , 'inovative Solar' , 'Bangalore' , 'kengeri' , 9453102587),

('v\_06' , 'greencloud Solar' , 'Bangalore' , 'nayandhalli' , 9102225478),

('v\_07' , 'tata Solar' , 'Bangalore' , 'shirke' , 7002312145);

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into [user](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/information-functions.html%23function_user) [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)

('u\_01' , 'abhi' , 'bangalore' , 'vijaynagara' , 'Domestic'),

('u\_02' , 'akash' , 'bangalore' , 'tunganagar' , 'Domestic'),

('u\_03' , 'uday' , 'bangalore' , 'nagarbhavi' , 'commercial'),

('u\_04' , 'ajith' , 'bangalore' , 'rajajinagar' , 'Domestic'),

('u\_05' , 'vijay' , 'bangalore' , 'peenya' , 'commercial'),

('u\_06' , 'varun' , 'bangalore' , 'anjananagar' , 'commercial');

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into solar\_panel [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)('pv\_01' , 40000 , 15),

('pv\_02' , 60000 , 25);

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into sell [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('v\_01' , 'pv\_01'), ('v\_01' , 'pv\_02'), ('v\_02' , 'pv\_01'),

('v\_03' , 'pv\_02'), ('v\_04' , 'pv\_01'), ('v\_05' , 'pv\_01'), ('v\_05' , 'pv\_02'),

('v\_06' , 'pv\_01'), ('v\_07' , 'pv\_02');

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into purchase [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('u\_01' , 'pv\_01'),('u\_02' , 'pv\_02'),('u\_03' , 'pv\_01'),('u\_04' , 'pv\_02'),('u\_05' , 'pv\_01'), ('u\_06' , 'pv\_02');

[insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into install\_panel [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)

('v\_01' , 'u\_01' , 'pv\_01' , "2022-01-15" , "monocrystalline" , 10),

('v\_02' , 'u\_02' , 'pv\_02' , "2022-03-21" , "polycrystalline" , 5),

('v\_03' , 'u\_03' , 'pv\_01' , "2022-02-10" , "monocrystalline" , 8),

('v\_04' , 'u\_04' , 'pv\_01' , "2020-10-15" , "monocrystalline" , 15),

('v\_05' , 'u\_05' , 'pv\_02' , "2022-01-15" , "polycrystalline" , 7),

('v\_06' , 'u\_06' , 'pv\_02' , "2022-05-25" , "polycrystalline" , 20),

('v\_07' , 'u\_01' , 'pv\_02' , "2022-08-15" , "monocrystalline" , 10);

QUERIES

1. List the vendors with most installations in domestic places

1. List the place name with highest capacity panel installed
2. Display the area where monocrystalline panels are installed
3. List the place where both type of panels are installed and calculate the installation charges
4. List the details of vendor and panel that is the oldest installation
5. Find the average sales of both type of panels in only commercial places