Assignment 2:

Name of the student: Khairul Izuan A. Karim

Registered E-mail: izuankarim@gmail.com

D2P1: Write a SQL query to create an Electricity table with following fields.

Table Name: Electricity

Column Name	Data Types
Consumer_id	Int
Consumer_name	Varchar(50)
Consumer_type	Varchar(50)
Cost_perread	int
Previous_read	Int
Current_read	Int
Total_read	Int
Amount	Int

Answer:

```
create table Electricity (Consumer_id int, Consumer_name
varchar(50), Consumer_type varchar(50), Cost_perread int,
Previous_read int, Curent_reat int, Total_read int, Amount int)
```

D2P2: Write a SQL query to insert any 10 Consumer records.

Note: *Current_read should be greater than the Previous_read. Consumer_type should be either "Home" or Office. If Consumer_type is "Home" than Cost_perread is 2 otherwise if Consumer_type is "Office" than Cost_perread is 5. Insert null records to the Total_read and Amount column.*

Answer:

```
insert into Electricity values (101, 'Amat', 'Home', 2, 10, 20, '', '')
insert into Electricity values (102, 'Abu', 'Office', 5, 8, 19, '', '')
insert into Electricity values (103, 'Ali', 'Home', 2, 9, 21, '', '')
insert into Electricity values (104, 'Akob', 'Home', 2, 7, 25, '', '')
insert into Electricity values (105, 'Azam', 'Office', 5, 6, 15, '', '')
insert into Electricity values (106, 'Aru', 'Home', 2, 8, 18, '', '')
insert into Electricity values (107, 'Acong', 'Office', 5, 4, 20, '', '')
insert into Electricity values (108, 'Azie', 'Office', 5, 3, 22, '', '')
insert into Electricity values (109, 'Ajis', 'Home', 2, 1, 20, '', '')
insert into Electricity values (110, 'Apo', 'Home', 2, 2, 23, '', '')
```

Results Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	101	Amat	Home	2	10	20	0	0
2	102	Abu	Office	5	8	19	0	0
3	103	Ali	Home	2	9	21	0	0
4	104	Akob	Home	2	7	25	0	0
5	105	Azam	Office	5	6	15	0	0
6	106	Aru	Home	2	8	18	0	0
7	107	Acong	Office	5	4	20	0	0
8	108	Azie	Office	5	3	22	0	0
9	109	Ajis	Home	2	1	20	0	0
10	110	Apo	Home	2	2	23	0	0

D2P3: Write a SQL query to display all Consumer records.

Answer:

```
select * from Electricity
```

Results Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	101	Amat	Home	2	10	20	0	0
2	102	Abu	Office	5	8	19	0	0
3	103	Ali	Home	2	9	21	0	0
4	104	Akob	Home	2	7	25	0	0
5	105	Azam	Office	5	6	15	0	0
6	106	Aru	Home	2	8	18	0	0
7	107	Acong	Office	5	4	20	0	0
8	108	Azie	Office	5	3	22	0	0
9	109	Ajis	Home	2	1	20	0	0
10	110	Apo	Home	2	2	23	0	0

D2P4: Write a SQL query to update the total_read and amount column.

Note:

Total_read=Current_read – Previous_read

*Amount=Total_read * cost_perread*

Answer:

```
update Electricity set Total_read = Curent_read - Previous_read
update Electricity set Amount = Total_read*Cost_perread
```

Results | Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	101	Amat	Home	2	10	20	10	20
2	102	Abu	Office	5	8	19	11	55
3	103	Ali	Home	2	9	21	12	24
4	104	Akob	Home	2	7	25	18	36
5	105	Azam	Office	5	6	15	9	45
6	106	Aru	Home	2	8	18	10	20
7	107	Acong	Office	5	4	20	16	80
8	108	Azie	Office	5	3	22	19	95
9	109	Ajis	Home	2	1	20	19	38
10	110	Apo	Home	2	2	23	21	42

D2P5: Write a SQL query to display the Consumer whose name start with “A”.

Answer:

```
select * from Electricity where Consumer_name like 'A%'
```

Results | Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	101	Amat	Home	2	10	20	10	20
2	102	Abu	Office	5	8	19	11	55
3	103	Ali	Home	2	9	21	12	24
4	104	Akob	Home	2	7	25	18	36
5	105	Azam	Office	5	6	15	9	45
6	106	Aru	Home	2	8	18	10	20
7	107	Acong	Office	5	4	20	16	80
8	108	Azie	Office	5	3	22	19	95
9	109	Ajis	Home	2	1	20	19	38
10	110	Apo	Home	2	2	23	21	42

D2P6: Write a SQL query to display the Consumer records whose name start with "A" and end with "y".

Answer:

```
select * from Electricity where Consumer_name like 'A%y'
```

Results | Messages

Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount

D2P7: Write a SQL query to display the Consumer_id and Consumer_name whose Amount<500.

Answer:

```
select Consumer_id, Consumer_name from Electricity where Amount < 500
```

Results | Messages

	Consumer_id	Consumer_name
1	101	Amat
2	102	Abu
3	103	Ali
4	104	Akob
5	105	Azam
6	106	Aru
7	107	Acong
8	108	Azie
9	109	Ajis
10	110	Apo

D2P8: Write a SQL query to display Consumer records whose Amount between 100 to 200.

Answer:

```
select * from Electricity where Amount between 100 and 200
```

Results | Messages

Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount

D2P9: Write a SQL query to display the Consumer_name who's having lowest Total_read.

Answer:

```
select Consumer_name from Electricity where Total_read = (select min
(Total_read) from Electricity)
```

Results | Messages

	Consumer_name
1	Azam

D2P10: Write a SQL query to display the Consumer_name who's having highest Amount.

Answer:

```
select Consumer_name from Electricity where Amount = (select max
(Amount) from Electricity)
```

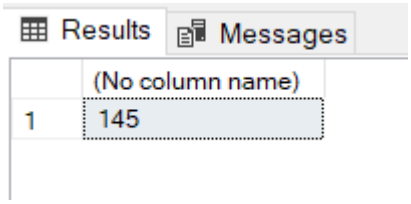
Results | Messages

	Consumer_name
1	Azie

D2P11: Write a SQL query to display sum of the total_read.

Answer:

```
select sum (total_read) from Electricity
```



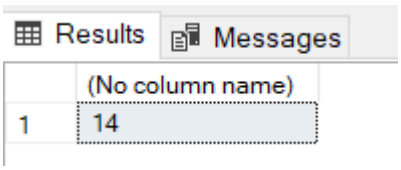
Results | Messages

	(No column name)
1	145

D2P12: Write a SQL query to display average of the total_read.

Answer:

```
select avg (total_read) from Electricity
```



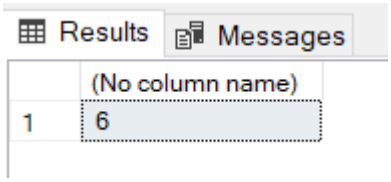
Results | Messages

	(No column name)
1	14

D2P13: Write a SQL query to display number of "Home" Consumers.

Answer:

```
select count (Consumer_type) from Electricity where Consumer_type =
'Home'
```



Results | Messages

	(No column name)
1	6

D2P14: Write a SQL query to sort (both ascending and descending order) the Consumer regarding their names.

Answer:

Ascending:

```
select * from Electricity order by Consumer_name asc
```

Results | Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	102	Abu	Office	5	8	19	11	55
2	107	Acong	Office	5	4	20	16	80
3	109	Ajis	Home	2	1	20	19	38
4	104	Akob	Home	2	7	25	18	36
5	103	Ali	Home	2	9	21	12	24
6	101	Amat	Home	2	10	20	10	20
7	110	Apo	Home	2	2	23	21	42
8	106	Aru	Home	2	8	18	10	20
9	105	Azam	Office	5	6	15	9	45
10	108	Azie	Office	5	3	22	19	95

Descending:

```
select * from Electricity order by Consumer_name desc
```

Results | Messages

	Consumer_id	Consumer_name	Consumer_type	Cost_perread	Previous_read	Curent_read	Total_read	Amount
1	108	Azie	Office	5	3	22	19	95
2	105	Azam	Office	5	6	15	9	45
3	106	Aru	Home	2	8	18	10	20
4	110	Apo	Home	2	2	23	21	42
5	101	Amat	Home	2	10	20	10	20
6	103	Ali	Home	2	9	21	12	24
7	104	Akob	Home	2	7	25	18	36
8	109	Ajis	Home	2	1	20	19	38
9	107	Acong	Office	5	4	20	16	80
10	102	Abu	Office	5	8	19	11	55

******* ALL THE BEST *******