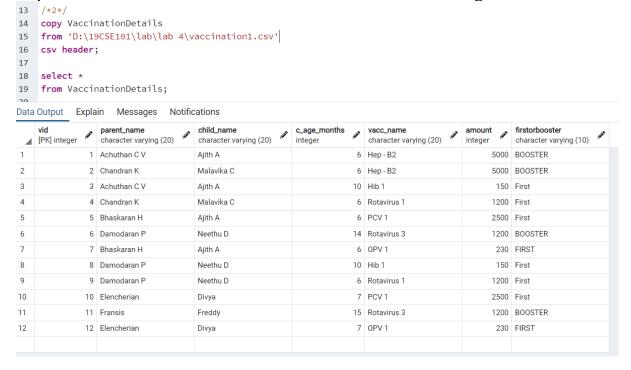
## Amrita School of Engineering, Amritapuri Campus. 19CSE101: Computer Systems Essentials LAB SHEET 4 -RDBMS

Create the table *VaccinationDetails* with attributes VID, Parent\_Name, Child\_Name, C\_Age\_Months, Vacc\_Name, Amount, FirstORBooster.
 Hint: Refer the CSV file given and decide the data type required for each attribute.



2. Import data to the table *VaccinationDetails* from the csv file given.



3. Retrieve the following information

[null]

1

a) Name of the parent and age of the child (in months) from the relation.



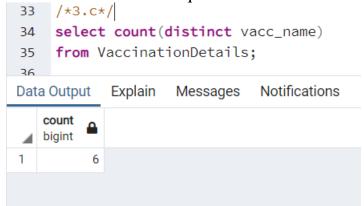
Data	Output Explain Me	ssages Notifications
4	parent_name character varying (20)	c_age_months integer
1	Achuthan C V	6
2	Chandran K	6
3	Achuthan C V	10
4	Chandran K	6
5	Bhaskaran H	6
6	Damodaran P	14
7	Bhaskaran H	6
8	Damodaran P	10
9	Damodaran P	6
10	Elencherian	7
11	Fransis	15
12	Elencherian	7

b) The maximum age of the child who received a first dose of Rotavirus 3.

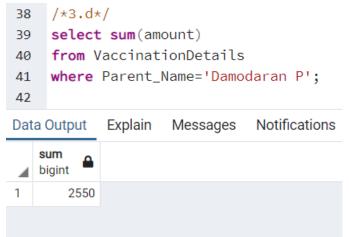
```
/*3.b*/
select max(c_age_months)
from VaccinationDetails
where Vacc_Name='Rotavirus 3' and FirstORBooster='First';

Data Output Explain Messages Notifications
```

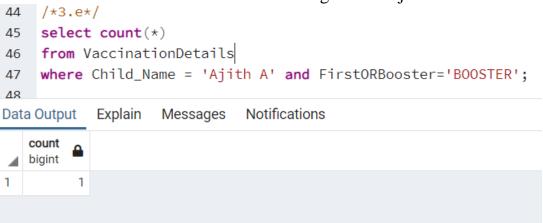
c) The total number of unique vaccine names available in the relation.



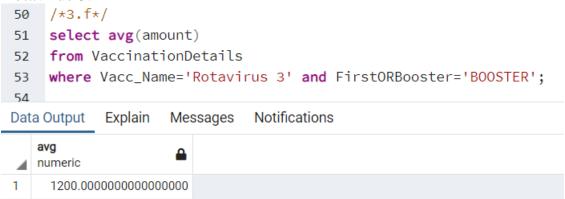
d) The total amount of money spent on vaccine by the parent DAMODARAN P.



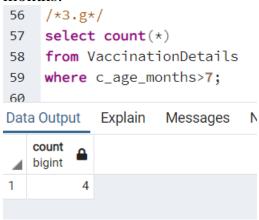
e) The total number of booster dose vaccines given to Ajith A.



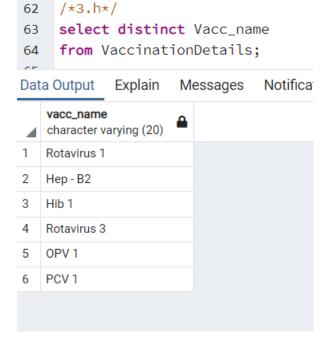
f) The average amount of money received by the booster doses of Rotavirus 3.



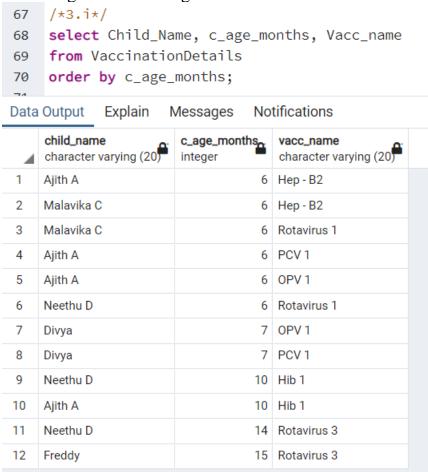
g) The total number of children received a vaccine above the age of 7 months.



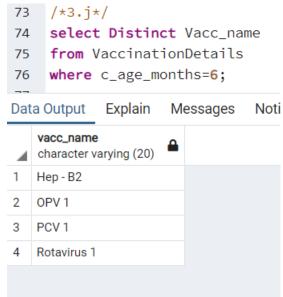
h) Display the names of different types of vaccines given to the children.



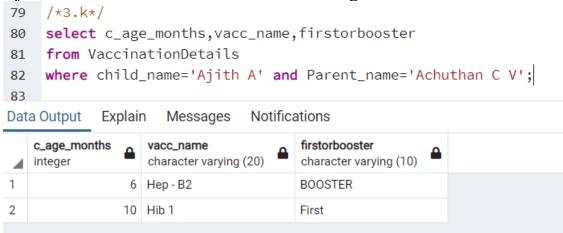
i) Display the child's name, age and the vaccine given to them in the ascending order of the age.



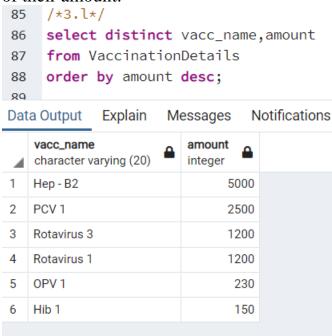
j) Find the different types of vaccines given to the children of age 6 months.



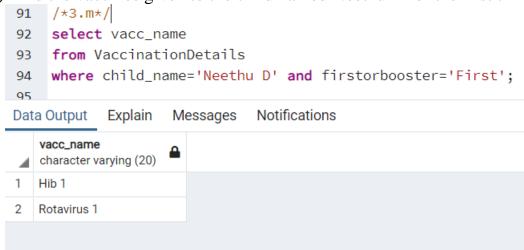
k) Display in increasing order, the different types of vaccines given to Ajith A son of Achuthan C V at his different age.



1) Display the different types of vaccines and amount in decreasing order of their amount.

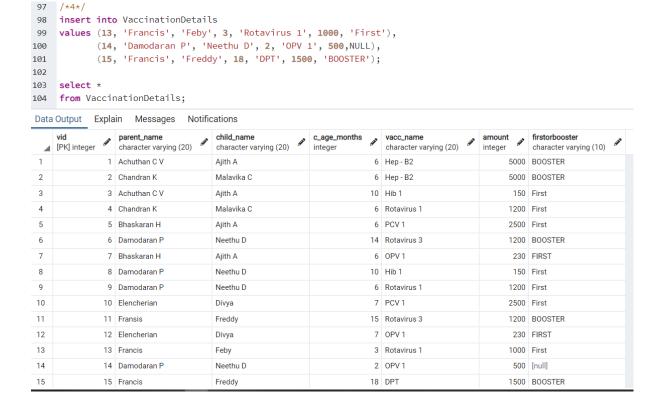


m) Find the vaccines given to the child named Neethu D for the first time.



4. Insert the following tuples into the relation VaccinationDetails

VID	Parent_Name	Child_Name	C_Age_Months	Vacc_Name	Amount	FirstORBooster
13	Francis	Feby	3	Rotavirus 1	1000	First
14	Damodaran P	Neethu D	2	OPV 1	500	
15	Francis	Freddy	18	DPT	1500	Booster



## 5. Update the following data

a) Modify the dosage of vaccine 'Hib 1' to Booster.

107	/*5.a*/
108	<pre>update VaccinationDetails</pre>
109	<pre>set firstorbooster='BOOSTER'</pre>
110	<pre>where vacc_name='Hib 1';</pre>
111	
112	select *
113	<pre>from VaccinationDetails;</pre>
114	

Data	Data Output Explain Messages Notifications									
_	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)			
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER			
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER			
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First			
4	5	Bhaskaran H	Ajith A	6	PCV 1	2500	First			
5	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER			
6	7	Bhaskaran H	Ajith A	6	OPV 1	230	FIRST			
7	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First			
8	10	Elencherian	Divya	7	PCV 1	2500	First			
9	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER			
10	12	Elencherian	Divya	7	OPV 1	230	FIRST			
11	13	Francis	Feby	3	Rotavirus 1	1000	First			
12	14	Damodaran P	Neethu D	2	OPV 1	500	[null]			
13	15	Francis	Freddy	18	DPT	1500	BOOSTER			
14	3	Achuthan C V	Ajith A	10	Hib 1	150	BOOSTER			
15	8	Damodaran P	Neethu D	10	Hib 1	150	BOOSTER			

b) Enter the details of Neethu D who took vaccine OPV 1 as the First dosage.

```
116  /*5.b*/
117  update VaccinationDetails
118  set firstorbooster='First'
119  where child_name='Neethu D' and vacc_name='OPV 1';
120
121  select *
122  from VaccinationDetails;
```

Data	Data Output Explain Messages Notifications									
4	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)			
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER			
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER			
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First			
4	5	Bhaskaran H	Ajith A	6	PCV 1	2500	First			
5	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER			
6	7	Bhaskaran H	Ajith A	6	OPV 1	230	FIRST			
7	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First			
8	10	Elencherian	Divya	7	PCV 1	2500	First			
9	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER			
10	12	Elencherian	Divya	7	OPV 1	230	FIRST			
11	13	Francis	Feby	3	Rotavirus 1	1000	First			
12	15	Francis	Freddy	18	DPT	1500	BOOSTER			
13	3	Achuthan C V	Ajith A	10	Hib 1	150	BOOSTER			
14	8	Damodaran P	Neethu D	10	Hib 1	150	BOOSTER			
15	14	Damodaran P	Neethu D	2	OPV 1	500	First			

c) Increase the amount of vaccine 'Hib 1' by 300.

```
125  /*5.c*/
126  update VaccinationDetails
127  set amount=amount+300
128  where vacc_name='Hib 1';
129
130  select *
131  from VaccinationDetails;
```

4	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First
4	5	Bhaskaran H	Ajith A	6	PCV 1	2500	First
5	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER
6	7	Bhaskaran H	Ajith A	6	OPV 1	230	FIRST
7	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First
8	10	Elencherian	Divya	7	PCV 1	2500	First
9	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER
10	12	Elencherian	Divya	7	OPV 1	230	FIRST
11	13	Francis	Feby	3	Rotavirus 1	1000	First
12	15	Francis	Freddy	18	DPT	1500	BOOSTER
13	14	Damodaran P	Neethu D	2	OPV 1	500	First
14	3	Achuthan C V	Ajith A	10	Hib 1	450	BOOSTER
15	8	Damodaran P	Neethu D	10	Hib 1	450	BOOSTER

## 6. Remove the following data

a) Details of Ajith A son of Bhaskaran H.

```
/*6.a*/
delete from VaccinationDetails
where child_name='Ajith A' and parent_name='Bhaskaran H';
select *
from VaccinationDetails;
```

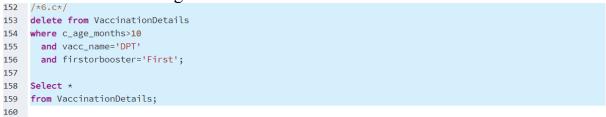
4	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First
4	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER
5	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First
6	10	Elencherian	Divya	7	PCV 1	2500	First
7	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER
8	12	Elencherian	Divya	7	OPV 1	230	FIRST
9	13	Francis	Feby	3	Rotavirus 1	1000	First
10	15	Francis	Freddy	18	DPT	1500	BOOSTER
11	14	Damodaran P	Neethu D	2	OPV 1	500	First
12	3	Achuthan C V	Ajith A	10	Hib 1	450	BOOSTER
13	8	Damodaran P	Neethu D	10	Hib 1	450	BOOSTER

b) Details of children under age 5 months who took the vaccine Rotavirus 1 as First dosage.

142	/*6.b*/
143	<pre>delete from VaccinationDetails</pre>
144	<pre>where c_age_months&lt;5</pre>
145	<pre>and vacc_name='Rotavirus 1'</pre>
146	<pre>and firstorbooster='First';</pre>
147	
148	select *
149	<pre>from VaccinationDetails;</pre>

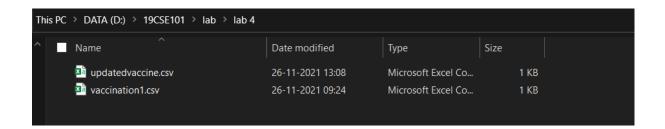
Data	Data Output Explain Messages Notifications									
	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)			
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER			
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER			
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First			
4	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER			
5	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First			
6	10	Elencherian	Divya	7	PCV 1	2500	First			
7	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER			
8	12	Elencherian	Divya	7	OPV 1	230	FIRST			
9	15	Francis	Freddy	18	DPT	1500	BOOSTER			
10	14	Damodaran P	Neethu D	2	OPV 1	500	First			
11	3	Achuthan C V	Ajith A	10	Hib 1	450	BOOSTER			
12	8	Damodaran P	Neethu D	10	Hib 1	450	BOOSTER			

c) Remove all the details of children above age 10, who took the vaccine 'DPT' ad the first dosage.



4	vid [PK] integer	parent_name character varying (20)	child_name character varying (20)	c_age_months integer	vacc_name character varying (20)	amount integer	firstorbooster character varying (10)
1	1	Achuthan C V	Ajith A	6	Hep - B2	5000	BOOSTER
2	2	Chandran K	Malavika C	6	Hep - B2	5000	BOOSTER
3	4	Chandran K	Malavika C	6	Rotavirus 1	1200	First
4	6	Damodaran P	Neethu D	14	Rotavirus 3	1200	BOOSTER
5	9	Damodaran P	Neethu D	6	Rotavirus 1	1200	First
6	10	Elencherian	Divya	7	PCV 1	2500	First
7	11	Fransis	Freddy	15	Rotavirus 3	1200	BOOSTER
8	12	Elencherian	Divya	7	OPV 1	230	FIRST
9	15	Francis	Freddy	18	DPT	1500	BOOSTER
10	14	Damodaran P	Neethu D	2	OPV 1	500	First
11	3	Achuthan C V	Ajith A	10	Hib 1	450	BOOSTER
12	8	Damodaran P	Neethu D	10	Hib 1	450	BOOSTER

## 7. Export the data in the relations *VaccinationDetails* to *updatedvaccine.csv*



	Α	В	С	D	Е	F	G	Н
1	vid	parent_na	child_nam	c_age_mo	vacc_name	amount	firstorboos	ster
2	1	Achuthan (	Ajith A	6	Hep - B2	5000	BOOSTER	
3	2	Chandran	Malavika (	6	Hep - B2	5000	BOOSTER	
4	4	Chandran	Malavika (	6	Rotavirus :	1200	First	
5	6	Damodara	Neethu D	14	Rotavirus	1200	BOOSTER	
6	9	Damodara	Neethu D	6	Rotavirus :	1200	First	
7	10	Elencheria	Divya	7	PCV 1	2500	First	
8	11	Fransis	Freddy	15	Rotavirus	1200	BOOSTER	
9	12	Elencheria	Divya	7	OPV 1	230	FIRST	
10	15	Francis	Freddy	18	DPT	1500	BOOSTER	
11	14	Damodara	Neethu D	2	OPV 1	500	First	
12	3	Achuthan (	Ajith A	10	Hib 1	450	BOOSTER	
13	8	Damodara	Neethu D	10	Hib 1	450	BOOSTER	
14								
1 [								