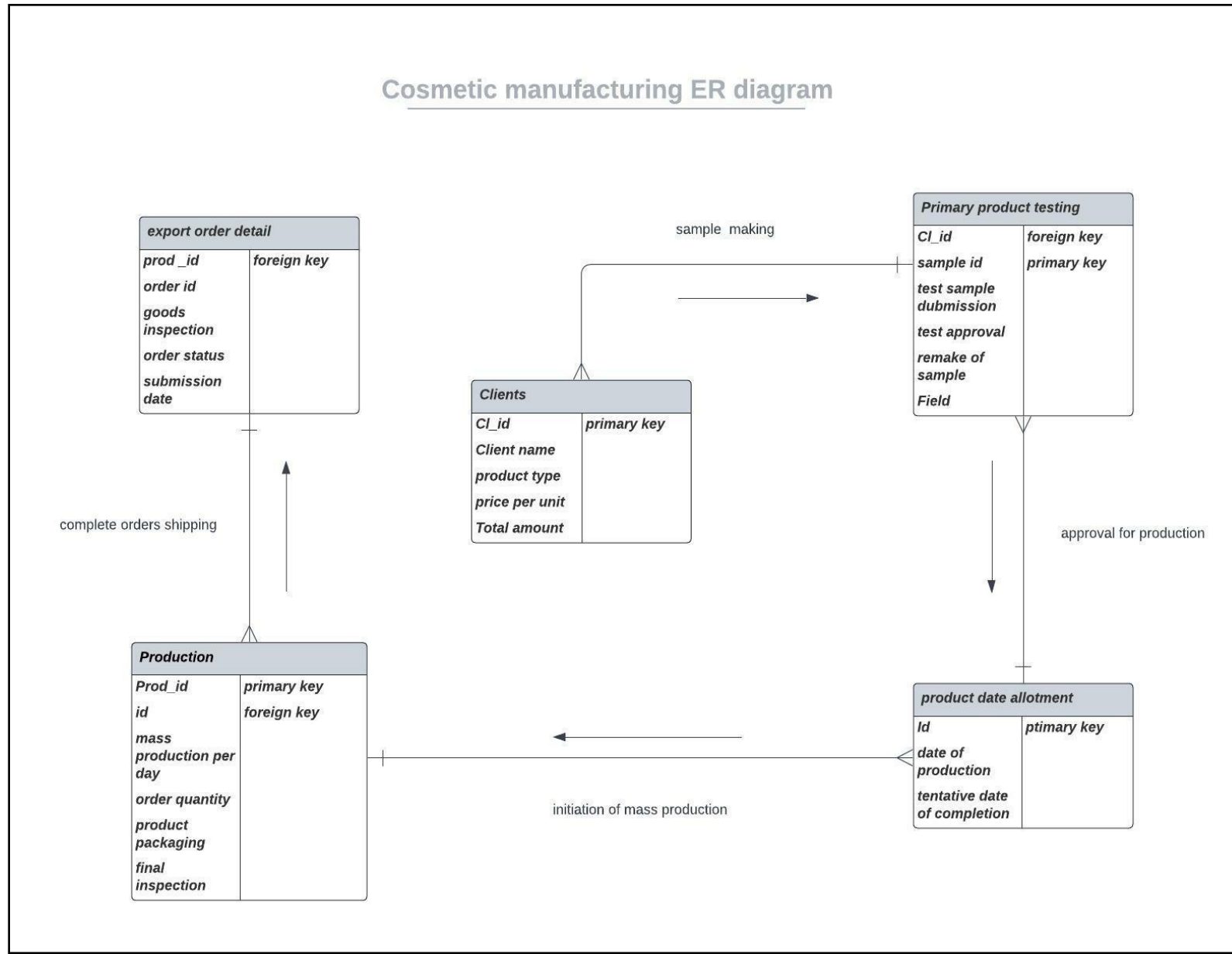


Cosmetic Manufacturing Company

There are many manufacturing companies in different fields where a large amount of production takes place and where managers need to pen down every detail right from the raw materials to the finishing of the product and dispatching it safely to the clients. Here I made a ppt on a Cosmetic Manufacturing Company to represent how a database can ease the management of every tiny piece of data. The main advantage of using the database is the data remain safe and we can easily retrieve the particular data we want at any time, the database helps to show the relation between two data files of the same field and we can easily manipulate it if we need to make changes in existing data which helps to maintain records of big data from the different field without mixing the data.

Entity Relationship Diagram



Structure Of Tables:

1.Clients:

```
mysql> desc clients;
```

Field	Type	Null	Key	Default	Extra
Cl_id	int	NO	PRI	NULL	
Client_name	varchar(20)	NO		NULL	
Product_type	varchar(20)	YES		NULL	
Total_prod	int	YES		NULL	
Price_per_unit	int	YES		NULL	
Total_amount	int	YES		NULL	
Final_amount_TotalA_PLUS_GST	int	YES		NULL	

```
7 rows in set (0.00 sec)
```

2.Primary product testing

```
mysql> desc primary_product_testing;
```

Field	Type	Null	Key	Default	Extra
Cl_id	int	YES	MUL	NULL	
sample_id	int	NO	PRI	NULL	
Test_sample_submission	varchar(20)	YES		NULL	
Prod_quality	varchar(20)	YES		NULL	
Chemical_formation	varchar(20)	YES		NULL	
Test_Approval	varchar(10)	YES		NULL	
Remake_sample	varchar(10)	YES		NULL	

```
7 rows in set (0.00 sec)
```

3. Production date allotment

```
mysql> desc prod_date_allotment;
```

Field	Type	Null	Key	Default	Extra
Cl_id	int	YES	MUL	NULL	
Date_of_Production	date	YES		NULL	
Tentative_date_complition	date	YES		NULL	

3 rows in set (0.00 sec)

4.Production

```
mysql> desc production;
```

Field	Type	Null	Key	Default	Extra
Prod_id	int	NO	PRI	NULL	
client_id	int	YES	MUL	NULL	
Mass_production_perday_units	int	YES		NULL	
Order_quantity	int	YES		NULL	
Product_packaging	varchar(20)	YES		NULL	
Batch_complition	varchar(20)	YES		NULL	
Final_inspection	varchar(15)	YES		NULL	

```
7 rows in set (0.00 sec)
```

5.Export order detail

```
mysql> desc exoprt_order_detail;
```

Field	Type	Null	Key	Default	Extra
Prod_id	int	YES	MUL	NULL	
client_id	int	YES	MUL	NULL	
order_id	int	NO	PRI	NULL	
Finished_Goods_inspection	varchar(50)	YES		NULL	
Email_updates	varchar(20)	YES		NULL	
Order_status	varchar(20)	YES		NULL	
Client_order_sumbission	varchar(20)	YES		NULL	
Submission_Date	date	YES		NULL	

```
8 rows in set (0.00 sec)
```

Content of table

1.Client:

```
mysql> select * from clients;
```

Cl_id	Client_name	Product_type	Total_prod	Price_per_unit	Total_amount	Final_amount_TotalA_PLUS_GST
1	Biotin	shampoo	20000	450	9000000	9450000
2	Deyega	soap	40000	1000	1400000	1470000
3	Skin-fix	Body-lotion	400000	450	18000000	18900000
4	Kaparo	Body-wash	35000	400	14000000	14700000
5	Scalp-plus	shampoo	30000	750	12000000	12600000
6	Herbal-active	Face-wash	35000	250	8750000	9187500
7	Detox	Face-wash	45000	400	18000000	18900000
8	Moana	Night-cream	50000	850	12500000	13125000
9	Baccon	Body-lotion	30000	700	12000000	12600000
10	Merlin	Body-lotion	45000	800	18000000	18900000
11	Trisha	Face-wash	50000	900	22500800	23625840
12	Biotin	Night-cream	25000	850	5000000	5250000
13	Camphoril	Body-wash	20000	700	9000000	9450000
14	Saffron	soap	35000	1000	15750000	16537500
15	Tulip	shampoo	45000	750	18000000	18900000
16	Sparkle	Night-cream	40000	850	8000000	84000000
17	Herbal-active	Body-lotion	25000	800	10000000	10500000
18	Venesa	shampoo	25000	750	11250000	11812500
19	Karma	Night-cream	30000	850	12000000	12600000
20	Khadi	soap	60000	1000	2400000	2520000

```
20 rows in set (0.00 sec)
```


2.Primary Product Testing

```
mysql> select * from primary_product_testing;
```

Cl_id	sample_id	Test_sample_submission	Prod_quality	Chemical_formation	Test_Approval	Remake_sample
1	101	Submitted	perfect	correct	Pass	No
2	102	Submitted	defective	incorrect	Fail	Yes
3	103	Submitted	perfect	correct	Pass	No
4	104	Submitted	perfect	correct	Pass	No
5	105	Submitted	perfect	correct	Pass	No
6	106	Submitted	perfect	correct	Pass	No
7	107	Submitted	perfect	correct	Pass	No
8	108	Submitted	perfect	correct	Pass	No
9	109	Submitted	perfect	correct	Pass	No
10	110	Submitted	perfect	correct	Pass	No
11	111	Submitted	perfect	correct	Pass	No
12	112	Submitted	perfect	correct	Pass	No
13	113	Submitted	defective	incorrect	Fail	Yes
14	114	Submitted	perfect	correct	Pass	No
15	115	Submitted	perfect	correct	Pass	No
16	116	Submitted	defective	incorrect	Fail	Yes
17	117	Submitted	perfect	correct	Pass	No
18	118	Submitted	perfect	correct	Pass	No
19	119	Submitted	perfect	correct	Pass	No
20	120	Submitted	perfect	correct	Pass	No

```
20 rows in set (0.00 sec)
```

3.Product date allotment

```
mysql> select * from prod_date_allotment;
```

Cl_id	Date_of_Production	Tentative_date_complition
1	2022-01-15	2022-02-25
2	2022-01-14	2022-03-07
3	2022-01-16	2022-03-08
4	2022-01-18	2022-03-04
5	2022-01-15	2022-03-03
6	2022-05-16	2022-07-08
7	2022-05-17	2022-07-21
8	2022-05-18	2022-04-08
9	2022-05-19	2022-07-24
10	2022-05-20	2022-08-05
11	2022-09-15	2022-12-22
12	2022-09-18	2022-11-06
13	2022-09-17	2022-11-05
14	2022-09-16	2022-11-04
15	2022-09-18	2022-12-04
16	2022-12-14	2022-02-19
16	2022-12-15	2023-01-28
18	2022-12-17	2023-02-01
19	2022-12-16	2023-02-04
20	2022-12-16	2023-02-28

```
20 rows in set (0.00 sec)
```

4.Production

```
mysql> select * from production;
```

Prod_id	client_id	Mass_production_perday_units	Order_quantity	Product_packaging	Batch_complition	Final_inspection
1101	1	750	20000	Done	complete	complete
1102	2	1000	40000	Not-done	Delayed	incomplete
1103	3	800	40000	Done	complete	complete
1104	4	700	35000	Done	complete	complete
1105	5	750	30000	Done	complete	complete
1106	6	900	35000	Done	complete	complete
1107	7	900	45000	Done	complete	complete
1108	8	850	50000	Done	complete	complete
1109	9	700	30000	Done	complete	complete
1110	10	800	45000	Done	complete	complete
1111	11	900	50000	Done	complete	complete
1112	12	850	25000	Done	complete	complete
1113	13	700	20000	Not-done	Delayed	incomplete
1114	14	1000	35000	Done	complete	complete
1115	15	750	45000	Done	complete	complete
1116	16	850	40000	Not-done	Delayed	incomplete
1117	17	800	25000	Done	complete	complete
1118	18	750	25000	Done	complete	complete
1119	19	850	30000	Done	complete	complete
1120	20	1000	60000	Done	complete	complete

```
20 rows in set (0.00 sec)
```

5.Export order detail

```
mysql> select * from exoprt_order_detail;
```

Prod_id	client_id	order_id	Finished_Goods_inspection	Email_updates	Order_status	Client_order_sumbission	Submission_Date
1101	1	1201	complete	sent	done	done	2022-02-25
1102	2	1202	incomplete	not-sent	not-done	not-done	0000-00-00
1103	3	1203	complete	sent	done	done	2022-03-09
1104	4	1204	complete	sent	done	done	2022-03-05
1105	5	1205	complete	sent	done	done	2022-03-04
1106	6	1206	complete	sent	done	done	2022-07-09
1107	7	1207	complete	sent	done	done	2022-07-22
1108	8	1208	complete	sent	done	done	2022-04-09
1109	9	1209	complete	sent	done	done	2022-07-25
1110	10	1210	complete	sent	done	done	2022-08-06
1111	11	1211	complete	sent	done	done	2022-12-23
1112	12	1212	complete	sent	done	done	2022-11-07
1113	13	1213	incomplete	not-sent	not-done	not-done	0000-00-00
1114	14	1214	complete	sent	done	done	2022-11-03
1115	15	1215	complete	sent	done	done	2022-12-05
1116	16	1216	incomplete	not-sent	not-done	not-done	0000-00-00
1117	17	1217	complete	sent	done	done	2023-01-29
1118	18	1218	complete	sent	done	done	2023-02-02
1119	19	1219	complete	sent	done	done	2023-02-05
1120	20	1220	complete	sent	done	done	2023-03-02

```
20 rows in set (0.00 sec)
```

Sub-queries

1. Display production stage of all the products who's order status is done

```
mysql> select * from production where Prod_id in(select Prod_id from exopr_order_detail where Order_status in('done'));
```

Prod_id	id	client_id	Mass_production_perday_units	Order_quantity	Product_packaging	Batch_complition	Final_inspection
1101	10	1	750	20000	Done	complete	complete
1103	30	3	800	40000	Done	complete	complete
1104	40	4	700	35000	Done	complete	complete
1105	50	5	750	30000	Done	complete	complete
1106	60	6	900	35000	Done	complete	complete
1107	70	7	900	45000	Done	complete	complete
1108	80	8	850	50000	Done	complete	complete
1109	90	9	700	30000	Done	complete	complete
1110	100	10	800	45000	Done	complete	complete
1111	110	11	900	50000	Done	complete	complete
1112	120	12	850	25000	Done	complete	complete
1114	140	14	1000	35000	Done	complete	complete
1115	150	15	750	45000	Done	complete	complete
1117	170	17	800	25000	Done	complete	complete
1118	180	18	750	25000	Done	complete	complete
1119	190	19	850	30000	Done	complete	complete
1120	200	20	1000	60000	Done	complete	complete

17 rows in set (0.04 sec)

2.Display the sample_id who got the test approval for mass production from the client 'Biotin' and 'Herbal-active'.

mysql> select sample_id, Test_Approval from primary_product_testing where Cl_id in(select Cl_id from clients where Client_name in('Biotin','Herbal-active'));

sample_id	Test_Approval
101	Pass
106	Pass
112	Pass
117	Pass

4 rows in set (0.00 sec)

3..Display all the primary testing done of the products who's order status ready to dispatch.

```
mysql> select * from primary_product_testing where Cl_id in(select Cl_id from exopr_order_detail where Order_status in('done'));
```

Cl_id	sample_id	Test_sample_submission	Prod_quality	Chemical_formation	Test_Approval	Remake_sample
1	101	Submitted	perfect	correct	Pass	No
3	103	Submitted	perfect	correct	Pass	No
4	104	Submitted	perfect	correct	Pass	No
5	105	Submitted	perfect	correct	Pass	No
6	106	Submitted	perfect	correct	Pass	No
7	107	Submitted	perfect	correct	Pass	No
8	108	Submitted	perfect	correct	Pass	No
9	109	Submitted	perfect	correct	Pass	No
10	110	Submitted	perfect	correct	Pass	No
11	111	Submitted	perfect	correct	Pass	No
12	112	Submitted	perfect	correct	Pass	No
14	114	Submitted	perfect	correct	Pass	No
15	115	Submitted	perfect	correct	Pass	No
17	117	Submitted	perfect	correct	Pass	No
18	118	Submitted	perfect	correct	Pass	No
19	119	Submitted	perfect	correct	Pass	No
20	120	Submitted	perfect	correct	Pass	No

```
17 rows in set (0.00 sec)
```

4. Display final amount of product who's production id is updated and order submission is done to the client

```
mysql> select Client_name,Product_type,Final_amount_TotalA_PLUS_GST from clients where Cl_id in (select Cl_id from production where Prod_id in(select Prod_id from exoprt_order_detail where Client_order_submissio  
n in('done')));
```

Client_name	Product_type	Final_amount_TotalA_PLUS_GST
Biotin	shampoo	9450000
Skin-fix	Body-lotion	18900000
Kaparo	Body-wash	14700000
Scalp-plus	shampoo	12600000
Herbal-active	Face-wash	9187500
Detox	Face-wash	18900000
Moana	Night-cream	13125000
Baccon	Body-lotion	12600000
Merlin	Body-lotion	18900000
Trisha	Face-wash	23625840
Biotin	Night-cream	5250000
Saffron	soap	16537500
Tulip	shampoo	18900000
Herbal-active	Body-lotion	10500000
Venesa	shampoo	11812500
Karma	Night-cream	12600000
Khadi	soap	2520000

```
17 rows in set (0.00 sec)
```


5.Display all the detail from production stage of product who’s chemical formation is incorrect

```
mysql> select * from production where Cl_id in(select Cl_id from primary_product_testing where Chemical_formation in('incorrect'));
+-----+-----+-----+-----+-----+-----+-----+-----+
| Prod_id | ID   | Cl_id | Mass_production_perday_units | Order_quantity | Product_packaging | Batch_complition | Final_inspection |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1102    | 20   | 2     | 1000                         | 40000          | Not-done          | Delayed           | incomplete        |
| 1113    | 130  | 13    | 700                         | 20000          | Not-done          | Delayed           | incomplete        |
| 1116    | 160  | 16    | 850                         | 40000          | Not-done          | Delayed           | incomplete        |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

JOINS :

1.Display order id ,order status who's product packaging and final inspection is done

```
mysql> select order_id, Product_packaging,Final_inspection,Order_status from production as a inner join exoprt_order_detail as b on a.Prod_id=b.Prod_id;
```

order_id	Product_packaging	Final_inspection	Order_status
1201	Done	complete	done
1202	Not-done	incomplete	not-done
1203	Done	complete	done
1204	Done	complete	done
1205	Done	complete	done
1206	Done	complete	done
1207	Done	complete	done
1208	Done	complete	done
1209	Done	complete	done
1210	Done	complete	done
1211	Done	complete	done
1212	Done	complete	done
1213	Not-done	incomplete	not-done
1214	Done	complete	done
1215	Done	complete	done
1216	Not-done	incomplete	not-done
1217	Done	complete	done
1218	Done	complete	done
1219	Done	complete	done
1220	Done	complete	done

20 rows in set (0.00 sec)

2. Display test approval and date to initiate the production who's test sample are submitted

```
mysql> select Test_sample_submission,Test_Approval, Date_of_Production from primary_product_testing as a right join prod_date_allotment as b on a.Cl_id=b.Cl_id;
```

Test_sample_submission	Test_Approval	Date_of_Production
Submitted	Pass	2022-01-15
Submitted	Fail	0000-00-00
Submitted	Pass	2022-01-16
Submitted	Pass	2022-01-18
Submitted	Pass	2022-01-15
Submitted	Pass	2022-05-16
Submitted	Pass	2022-05-17
Submitted	Pass	2022-05-18
Submitted	Pass	2022-05-19
Submitted	Pass	2022-05-20
Submitted	Pass	2022-09-15
Submitted	Pass	2022-09-18
Submitted	Fail	0000-00-00
Submitted	Pass	2022-09-16
Submitted	Pass	2022-09-18
Submitted	Fail	0000-00-00
Submitted	Pass	2022-12-15
Submitted	Pass	2022-12-17
Submitted	Pass	2022-12-16
Submitted	Pass	2022-12-16

20 rows in set (0.00 sec)

3. Display all the product's packaging , final inspection and order status for shipment of product.

```
mysql> select Product_packaging,Finished_Goods_inspection,Order_status from production as c left join exoprt_order_detail as d on c.client_id=d.client_id;
```

Product_packaging	Finished_Goods_inspection	Order_status
Done	complete	done
Not-done	incomplete	not-done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done
Not-done	incomplete	not-done
Done	complete	done
Done	complete	done
Not-done	incomplete	not-done
Done	complete	done
Done	complete	done
Done	complete	done
Done	complete	done

20 rows in set (0.00 sec)

4. Display client's order submission along with the date and amount to pay

```
mysql> select Client_name,Final_amount_TotalA_PLUS_GST,Client_order_submission,Submission_Date from clients as h inner join exoprt_order_detail as f on h.Cl_id =f.client_id;
```

Client_name	Final_amount_TotalA_PLUS_GST	Client_order_submission	Submission_Date
Biotin	9450000	done	2022-02-25
Deyega	1470000	not-done	0000-00-00
Skin-fix	18900000	done	2022-03-09
Kaparo	14700000	done	2022-03-05
Scalp-plus	12600000	done	2022-03-04
Herbal-active	9187500	done	2022-07-09
Detox	18900000	done	2022-07-22
Moana	13125000	done	2022-04-09
Baccon	12600000	done	2022-07-25
Merlin	18900000	done	2022-08-06
Trisha	23625840	done	2022-12-23
Biotin	5250000	done	2022-11-07
Camphoril	9450000	not-done	0000-00-00
Saffron	16537500	done	2022-11-03
Tulip	18900000	done	2022-12-05
Sparkle	84000000	not-done	0000-00-00
Herbal-active	10500000	done	2023-01-29
Venesa	11812500	done	2023-02-02
Karma	12600000	done	2023-02-05
Khadi	2520000	done	2023-03-02

20 rows in set (0.00 sec)

View

```
mysql> create view manufacture as select a.Client_name,b.Date_of_Production,c.Final_inspection,d.Submission_Date from clients as a inner join prod_date_allotment as b on a.Cl_id=b.Cl_id inner join production as c on b.Cl_id=c.client_id inner join exoprt_order_detail as d on c.Prod_id=d.Prod_id;
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> select * from manufacture;
```

Client_name	Date_of_Production	Final_inspection	Submission_Date
Biotin	2022-01-15	complete	2022-02-25
Deyega	0000-00-00	incomplete	0000-00-00
Skin-fix	2022-01-16	complete	2022-03-09
Kaparo	2022-01-18	complete	2022-03-05
Scalp-plus	2022-01-15	complete	2022-03-04
Herbal-active	2022-05-16	complete	2022-07-09
Detox	2022-05-17	complete	2022-07-22
Moana	2022-05-18	complete	2022-04-09
Baccon	2022-05-19	complete	2022-07-25
Merlin	2022-05-20	complete	2022-08-06
Trisha	2022-09-15	complete	2022-12-23
Biotin	2022-09-18	complete	2022-11-07
Camphoril	0000-00-00	incomplete	0000-00-00
Saffron	2022-09-16	complete	2022-11-03
Tulip	2022-09-18	complete	2022-12-05
Sparkle	0000-00-00	incomplete	0000-00-00
Herbal-active	2022-12-15	complete	2023-01-29
Venesa	2022-12-17	complete	2023-02-02
Karma	2022-12-16	complete	2023-02-05
Khadi	2022-12-16	complete	2023-03-02

```
20 rows in set (0.00 sec)
```