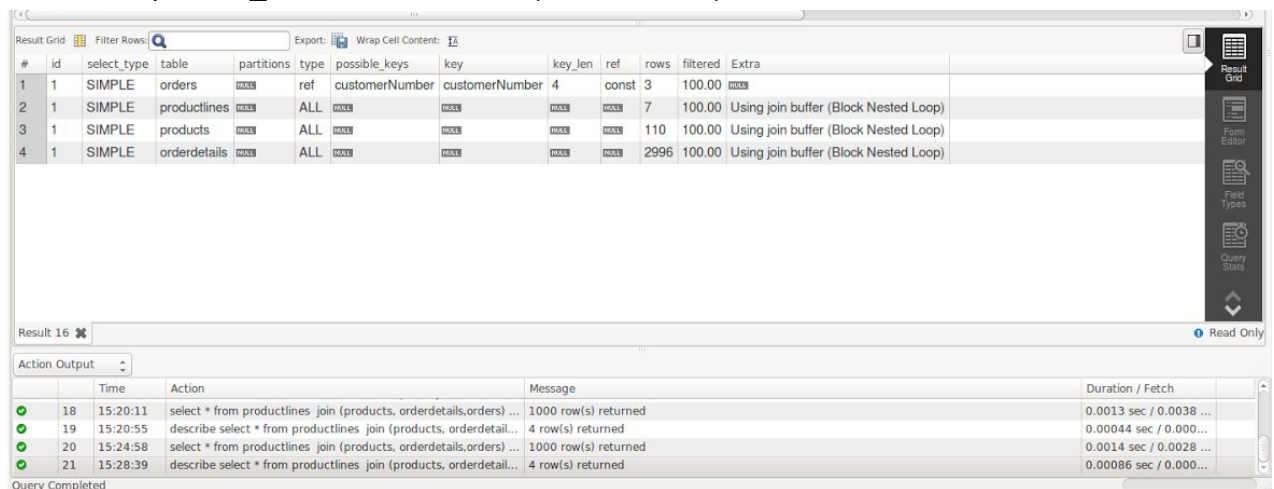Isaias Martinez Vieyra
A00988525

describe select productlines.textDescription
from productlines
join products on products.productLine = productlines.productLine
join orderdetails on orderdetails.productCode = products.productCode
join orders on orders.orderNumber = orderdetails.orderNumber
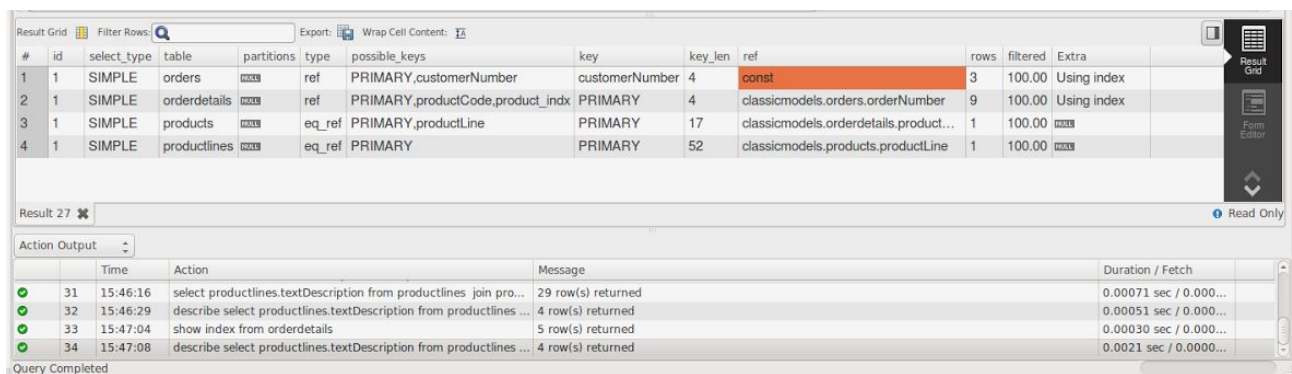where customerNumber = 112;

create index product_indx on orderdetails (orderNumber);

#	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	1	SIMPLE	orders	NULL	ref	customerNumber	customerNumber	4	const	3	100.00	NULL
2	1	SIMPLE	productlines	NULL	ALL	NULL	NULL	NULL	NULL	7	100.00	Using join buffer (Block Nested Loop)
3	1	SIMPLE	products	NULL	ALL	NULL	NULL	NULL	NULL	110	100.00	Using join buffer (Block Nested Loop)
4	1	SIMPLE	orderdetails	NULL	ALL	NULL	NULL	NULL	NULL	2996	100.00	Using join buffer (Block Nested Loop)

Result 16

		Time	Action	Message	Duration / Fetch
✓	18	15:20:11	select * from productlines join (products, orderdetails,orders) ...	1000 row(s) returned	0.0013 sec / 0.0038 ...
✓	19	15:20:55	describe select * from productlines join (products, orderdetail...	4 row(s) returned	0.00044 sec / 0.000...
✓	20	15:24:58	select * from productlines join (products, orderdetails,orders) ...	1000 row(s) returned	0.0014 sec / 0.0028 ...
✓	21	15:28:39	describe select * from productlines join (products, orderdetail...	4 row(s) returned	0.00086 sec / 0.000...

Query Completed

#	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	1	SIMPLE	orders	NULL	ref	PRIMARY,customerNumber	customerNumber	4	const	3	100.00	Using index
2	1	SIMPLE	orderdetails	NULL	ref	PRIMARY,productCode,product_indx	PRIMARY	4	classicmodels.orders.orderNumber	9	100.00	Using index
3	1	SIMPLE	products	NULL	eq_ref	PRIMARY,productLine	PRIMARY	17	classicmodels.orderdetails.product...	1	100.00	NULL
4	1	SIMPLE	productlines	NULL	eq_ref	PRIMARY	PRIMARY	52	classicmodels.products.productLine	1	100.00	NULL

Result 27

		Time	Action	Message	Duration / Fetch
✓	31	15:46:16	select productlines.textDescription from productlines join pro...	29 row(s) returned	0.00071 sec / 0.000...
✓	32	15:46:29	describe select productlines.textDescription from productlines ...	4 row(s) returned	0.00051 sec / 0.000...
✓	33	15:47:04	show index from orderdetails	5 row(s) returned	0.00030 sec / 0.000...
✓	34	15:47:08	describe select productlines.textDescription from productlines ...	4 row(s) returned	0.0021 sec / 0.0000...

Query Completed