Q5 CODE

```
--
-- COMP 421: Submission 03
-- Question 05
-- Group 40
--

-- Increase the appropriate category count and create a notification for subscribers
of that category
CREATE OR REPLACE FUNCTION update_category() RETURNS trigger AS $newProduct$
    BEGIN
        UPDATE category SET product_count = product_count + 1 WHERE cat_id =
NEW.cat_id;
        INSERT INTO notification (content, type, p_id) VALUES('new product', 1,
NEW.p_id);
        RETURN NEW;
    END;
$newProduct$ LANGUAGE plpgsql;

-- When a new product is inserted, call the procedure update_category()
CREATE TRIGGER update_cat AFTER INSERT ON product
    FOR EACH ROW EXECUTE PROCEDURE update_category();

INSERT INTO product (title, description, price, is_sold, datetime, expiry, u_id,
cat_id) VALUES ('the other shoe', 'comes with 2 laces', 421, false, CURRENT_TIMESTAMP,
CURRENT_TIMESTAMP, 75, 4);
```

BEFORE INSERT STATEMENT

Product Table

cs421.cs421g40.product

107 rows

	p...	title	description	price	image	is_sold	datetime	expiry	u_id	cat_id
88	88	mobile	Down-sized even-keeled hardware	$65.87	http://dummyimage.com/250x250.jpg/5fa2dd/ffffff	☐	2016-10-27 00:00:00.000000	2017-01-16 00:00:00.000000	94	4
89	89	background	Secured bottom-line Graphical User Interface	$215.28	http://dummyimage.com/250x250.jpg/5fa2dd/ffffff	☐	2016-04-07 00:00:00.000000	2016-12-07 00:00:00.000000	29	5
90	90	archive	Open-architected empowering open architecture	$180.29	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-04-05 00:00:00.000000	2016-10-24 00:00:00.000000	100	4
91	91	Cross-group	Proactive bottom-line moratorium	$297.42	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-12-28 00:00:00.000000	2016-05-16 00:00:00.000000	90	9
92	92	Synergistic	Progressive grid-enabled access	$203.48	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-04-01 00:00:00.000000	2016-09-29 00:00:00.000000	8	6
93	93	zero administration	Inverse dedicated local area network	$32.09	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-09-25 00:00:00.000000	2016-09-09 00:00:00.000000	3	9
94	94	solution	Virtual directional service-desk	$35.21	http://dummyimage.com/250x250.jpg/cc0000/ffffff	☐	2016-10-19 00:00:00.000000	2016-08-27 00:00:00.000000	80	2
95	95	Public-key	Reverse-engineered tertiary circuit	$58.58	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-05-01 00:00:00.000000	2016-06-05 00:00:00.000000	72	1
96	96	encompassing	Customizable maximized middleware	$254.07	http://dummyimage.com/250x250.jpg/5fa2dd/ffffff	☐	2016-06-28 00:00:00.000000	2016-07-07 00:00:00.000000	45	1
97	97	attitude-oriented	Face to face secondary orchestration	$56.22	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-02-24 00:00:00.000000	2016-12-14 00:00:00.000000	49	5
98	98	Pre-emptive	Self-enabling client-server framework	$27.85	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-07-16 00:00:00.000000	2016-04-16 00:00:00.000000	95	10
99	99	capacity	Stand-alone clear-thinking moderator	$76.26	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-10-29 00:00:00.000000	2016-05-03 00:00:00.000000	68	4
100	100	archive	Cross-platform asymmetric solution	$140.60	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-11-01 00:00:00.000000	2016-12-23 00:00:00.000000	93	8
101	106	iPhone 7	swag phone	$999.99		☐	2017-03-13 18:26:17.235000	2017-03-13 18:26:17.235000	1	2
102	107	Swag Shoes	These shoes are really swagalicious	$99.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-18 02:01:42.660000	2017-03-18 02:01:42.660000	10	2
103	110	asd	asdlaslf	$10.00	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-20 14:11:35.237000	2017-03-20 14:11:35.238000	94	9
104	116	one single shoe	just a shoe - no lace	$4,000.00	<null>	☐	2017-03-20 00:00:00.000000	2017-03-20 00:00:00.000000	75	4
105	117	Swag Book	THis book is really swag	$10.00	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-21 00:24:16.677000	2017-03-21 00:24:16.677000	94	3
106	118	Leather coat	Gucci leather coat, brand new	$999.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-21 00:37:24.680000	2017-03-21 00:37:24.681000	94	4
107	119	Macbook Air	Barely used Macbook Air	$799.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-22 11:32:30.360000	2017-03-22 11:32:30.361000	94	1

Category Table

q5.sql | cs421.cs421g40.category | cs421.cs421g40.notification | cs421.cs421g40.user_categories

10 rows

	cat_id	name	description	product_count	user_count	created_by
1	2	Home	Proactive real-time productivity	10	0	87
2	3	Books	Synchronised foreground strategy	13	1	97
3	4	Clothing	Face to face regional attitude	16	1	42
4	1	Electronics	Front-line transitional extranet	5	0	2
5	5	Sporting Goods	Digitized exuding contingency	8	0	15
6	9	Accessories	Monitored human-resource portal	14	0	70
7	10	Art	Secured reciprocal synergy	9	0	25
8	8	Cars	Fully-configurable zero tolerance local area network	9	1	100
9	7	Musical Instruments	Organic transitional firmware	9	1	12
10	6	Toys	User-friendly maximized adapter	13	1	12

Notification Table

q5.sql × | cs421.cs421g40.category × | cs421.cs421g40.notification ×

25 rows

<Filter criteria>

	n_id	content	type	p_id	t_id
9	21	transaction	0	7	1
10	1	comment	2	8	<null>
11	2	comment	2	95	<null>
12	3	comment	2	57	<null>
13	4	comment	2	95	<null>
14	5	comment	2	41	<null>
15	7	transaction	0	58	2
16	8	transaction	0	8	3
17	11	bid	3	99	<null>
18	12	bid	3	10	<null>
19	13	bid	3	27	<null>
20	14	bid	3	42	<null>
21	15	bid	3	87	<null>
22	22	new product	1	116	<null>
23	23	new product	1	117	<null>
24	24	new product	1	118	<null>
25	25	new product	1	119	<null>

AFTER INSERT STATEMENT

Product Table

cs421.cs421g40.product ×

108 rows | Tab-se...d (TSV) | View Query

<Filter criteria>

	p...	title	description	price	image	is_sold	datetime	expiry	u_id	cat_id
90	90	archive	Open-architected empowering open architecture	$180.29	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-04-05 00:00:00.000000	2016-10-24 00:00:00.000000	100	4
91	91	Cross-group	Proactive bottom-line moratorium	$297.42	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-12-28 00:00:00.000000	2016-05-16 00:00:00.000000	90	9
92	92	Synergistic	Progressive grid-enabled access	$203.48	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-04-01 00:00:00.000000	2016-09-29 00:00:00.000000	8	6
93	93	zero administration	Inverse dedicated local area network	$32.09	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-09-25 00:00:00.000000	2016-09-09 00:00:00.000000	3	9
94	94	solution	Virtual directional service-desk	$35.21	http://dummyimage.com/250x250.jpg/cc0000/ffffff	☐	2016-10-19 00:00:00.000000	2016-08-27 00:00:00.000000	80	2
95	95	Public-key	Reverse-engineered tertiary circuit	$58.58	http://dummyimage.com/250x250.jpg/ff4444/ffffff	☐	2016-05-01 00:00:00.000000	2016-06-05 00:00:00.000000	72	1
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100	100	archive	Cross-platform asymmetric solution	$140.60	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2016-11-01 00:00:00.000000	2016-12-23 00:00:00.000000	93	8
101	106	iPhone 7	swag phone	$999.99		☐	2017-03-13 18:26:17.235000	2017-03-13 18:26:17.235000	1	2
102	107	Swag Shoes	These shoes are really swagalicious	$99.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-18 02:01:42.660000	2017-03-18 02:01:42.660000	10	2
103	110	asd	asdlaslf	$10.00	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-20 14:11:35.237000	2017-03-20 14:11:35.238000	94	9
104	116	one single shoe	just a shoe - no lace	$4,000.00	<null>	☐	2017-03-20 00:00:00.000000	2017-03-20 00:00:00.000000	75	4
105	117	Swag Book	THis book is really swag	$10.00	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-21 00:24:16.677000	2017-03-21 00:24:16.677000	94	3
106	118	Leather coat	Gucci leather coat, brand new	$999.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-21 00:37:24.680000	2017-03-21 00:37:24.681000	94	4
107	119	Macbook Air	Barely used Macbook Air	$799.99	http://dummyimage.com/250x250.jpg/dddddd/000000	☐	2017-03-22 11:32:30.360000	2017-03-22 11:32:30.361000	94	1
108	120	the other shoe	comes with 2 laces	$421.00	<null>	☐	2017-03-23 17:15:14.262996	2017-03-23 17:15:14.262996	75	4

Category Table

q5.sql × | cs421.cs421g40.category × | cs421.cs421g40.notification ×

10 rows

<Filter criteria>

	cat_id	name	description	product_count	user_count	created_by
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2	3	Books	Synchronised foreground strategy	13	1	97
3	1	Electronics	Front-line transitional extranet	5	0	2
4	4	Clothing	Face to face regional attitude	17	1	42
5	5	Sporting Goods	Digitized exuding contingency	8	0	15
6	9	Accessories	Monitored human-resource portal	14	0	70
7	10	Art	Secured reciprocal synergy	9	0	25
8	8	Cars	Fully-configurable zero tolerance local area network	9	1	100
9	7	Musical Instruments	Organic transitional firmware	9	1	12
10	6	Toys	User-friendly maximized adapter	13	1	12

Notification Table

q5.sql × | cs421.cs421g40.category × | cs421.cs421g40.notification ×

26 rows

<Filter criteria>

	n_id	content	type	p_id	t_id
11	2	comment	2	95	<null>
12	3	comment	2	57	<null>
13	4	comment	2	95	<null>
14	5	comment	2	41	<null>
15	7	transaction	0	58	2
16	8	transaction	0	8	3
17	11	bid	3	99	<null>
18	12	bid	3	10	<null>
19	13	bid	3	27	<null>
20	14	bid	3	42	<null>
21	15	bid	3	87	<null>
22	22	new product	1	116	<null>
23	23	new product	1	117	<null>
24	24	new product	1	118	<null>
25	25	new product	1	119	<null>
26	26	new product	1	120	<null>

After a product insert, category count for appropriate category (4) increases by 1, and a new notification for that product is created.