

Exercises on Transactions and Triggers

Create a database 'Stocks' with the four relations Laptops, Products, Printers, and Personal Computers and answer the following questions based on the database. Data for the relations are given in the 2nd and 3rd page of the exercise.

Write transactions for each of the following cases:

1. To display the laptops with speed more than 600.
2. List down the laptops with RAM size 64.
3. To find the maker and the type of the cheapest price laptop.
4. To find the details of the PC with the highest price.
5. List down the model numbers and price of colour printers.
6. To find the makers of laptops.
7. To find the makers of printers.
8. To find the maker of the high speed laptop.
9. To find the maker and price of the high speed PC.
10. To find the RAM size of the slowest PC.

Write triggers for each of the following cases:

1. To check the RAM size of the PC is either 64, 128, or 256 before insert a new records. Check the trigger with one true case and one false case example.
2. Increase the price of all the printers by 2 times of the current price. Store the old price and model of the printers in before performing the update.
3. Delete the records of all the printers from product and store the details of deleted records in a separate relation.

Laptops					
LT Model	LT Speed	LT RAM	LT HD	Screen	LT Price
2001	700	64	05	12.1	1448
2002	800	96	10	15.1	2584
2003	850	64	10	15.1	2738
2004	550	32	05	12.1	999
2005	600	64	06	12.1	2399
2006	800	96	20	15.7	2999
2007	850	128	20	15.0	3099
2008	650	64	10	12.1	1249
2009	750	256	20	15.1	2599
2010	366	64	10	12.1	1499

Personal Computers					
PC Model	PC Speed	PC RAM	PC HD	CD ROM	PC Price
1001	700	64	10	48XCD	799
1002	1500	128	60	12XCD	2499
1003	866	128	20	8XCD	1999
1004	866	64	10	12XCD	999
1005	1000	128	20	12XCD	1499
1006	1300	256	40	16XCD	2119
1007	1400	128	80	12XCD	2299
1008	700	64	30	24XCD	999
1009	1200	128	80	16XCD	1699
1010	750	64	30	40XCD	699
1011	1100	128	60	16XCD	1299
1012	350	64	07	48XCD	799
1013	733	256	60	12XCD	2499

Printers			
PR Model	Colour	PR Type	PR Price
3001	true	ink-jet	231
3002	true	ink-jet	267
3003	false	laser	390
3004	true	ink-jet	439
3005	true	bubble	200
3006	true	laser	1999
3007	false	laser	350

Products						
Maker	Model	Type		Maker	Model	Type
A	1001	pc		C	2009	laptop
A	1002	pc		C	3002	printer
A	1003	pc		C	3003	printer
A	2004	laptop		C	3006	printer
A	2005	laptop		D	1009	pc
A	2006	laptop		D	1010	pc
B	1004	pc		D	1011	pc
B	1005	pc		D	2007	laptop
B	1006	pc		E	1012	pc
B	2001	laptop		E	1013	pc
B	2002	laptop		E	2010	laptop
B	2003	laptop		F	3001	printer
C	1007	pc		F	3004	printer
C	1008	pc		G	3005	printer
C	2008	laptop		H	3007	printer