EXPERIMENT NO.6

Aim- To perform various DDL and DML commands (for creating, dropping, selecting and inserting) on views based on Book Database created in Experiment 4 and 5.

Query 1: Create View pubstate_NY with check option on publisher table having publisher_state as 'NY'

Solution-

create view pubstate_NY as select * from publisher where publisher_state='NY' with check option constraint pubstate_NY_CK;

select * from pubstate_NY;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AP	Arcade Publishing	New York	NY
BB	Bantam Books	New York	NY
MP	McPherson and Co	Kingston	NY
PB	Pocket Books	New York	NY
RH	Random House	New York	NY
RZ	Rizzoli	New York	NY
SB	Schoken Books	New York	NY
SI	Signer	New York	NY
TH	Thames and Hudson	New York	NY
WN	W. W. Norton and Co.	New York	NY

Query 2: Insert following values in view pubstate_NY.

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AB	BPB Publ	Amsterdam	NY
BC	ABC Publ	Buffalo	NY
CD	XYZ Publ	Cortland	NY
DE	Friends Publ	Rome	NY
EF	Students Publ	New Burgh	NY

Solution-

insert into pubstate_NY values ('AB','BPB Publ', 'Amsterdam', 'NY');

insert into pubstate_NY values ('BC','ABC Publ', 'Buffalo', 'NY');

insert into pubstate_NY values('CD','XYZ Publ', 'Cortland', 'NY');

insert into pubstate_NY values('DE','Friends Publ', 'Rome', 'NY');

insert into pubstate_NY values('EF','Students Publ', 'New Burgh', 'NY');

select * from pubstate_NY;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AP	Arcade Publishing	New York	NY
BB	Bantam Books	New York	NY
MP	McPherson and Co	Kingston	NY
PB	Pocket Books	New York	NY
RH	Random House	New York	NY
RZ	Rizzoli	New York	NY
SB	Schoken Books	New York	NY
SI	Signer	New York	NY
TH	Thames and Hudson	New York	NY
WN	W. W. Norton and Co.	New York	NY
AB	BPB Publ	Amsterdam	NY
BC	ABC Publ	Buffalo	NY
CD	XYZ Publ	Cortland	NY
DE	Friends Publ	Rome	NY
EF	Students Publ	New Burgh	NY

Query 3: Update the publisher state to 'CA' where publisher_city='Kingston' in view pubstate_NY.

Solution- If we will write following query, error will be generated, as this view was created with the clause "with check option" and it ensures that INSERTs and UPDATEs cannot be performed on any rows that the view has not selected

update pubstate_NY set publisher_state = 'CA' where publisher_city = 'Kingston';

Output-

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ORA-01402: view WITH CHECK OPTION where-clause violation
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Query 4: Drop the view pubstate_NY.

Solution-

drop view pubstate_NY;

select * from pubstate_NY;

Output- View Dropped.

Query 5: Create View publisher_name_A on publisher table having publisher_name starting with 'A';

Solution-

Create view publisher_name_A as select * from publisher where publisher_name like 'A%';

select * from publisher_name_A;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AH	Arkham House Publ.	Sauk City	WI
AP	Arcade Publishing	New York	NY
AW	Addison Wesley	Reading	MA
BC	ABC Publ	Buffalo	NY

Query 6: Insert following values in view publisher_name_A;

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
LM	Alka Publ	New Delhi	ND
MN	Arya Publ	Chandigarh	PU
NO	Ajay Publ	Raipur	CH
OP	Amrit Publ	jaipur	RA

Solution-

insert into publisher_name_A values('LM','Alka Publ', 'New Delhi', 'ND');

insert into publisher_name_A values('MN','Arya Publ', 'Chandigarh', 'PU');

insert into publisher_name_A values('NO','Ajay Publ', 'Raipur', 'CH');

insert into publisher_name_A values('OP','Amrit Publ', 'jaipur', 'RA');

select * from publisher_name_A;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AH	Arkham House Publ.	Sauk City	WI
AP	Arcade Publishing	New York	NY
AW	Addison Wesley	Reading	MA
BC	ABC Publ	Buffalo	NY
LM	Alka Publ	New Delhi	ND
MN	Arya Publ	Chandigarh	PU
NO	Ajay Publ	Raipur	CH
OP	Amrit Publ	jaipur	RA

Query 7: Update the publisher city to 'Udaipur' where publisher_name='Amrit Publ' in view publisher_name_A.

Solution-

update publisher_name_A set publisher_city='Udaipur' where publisher_name='Amrit Publ';

select * from publisher_name_A;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
AH	Arkham House Publ.	Sauk City	WI
AP	Arcade Publishing	New York	NY
AW	Addison Wesley	Reading	MA
BC	ABC Publ	Buffalo	NY
LM	Alka Publ	New Delhi	ND
MN	Arya Publ	Chandigarh	PU
NO	Ajay Publ	Raipur	CH
OP	Amrit Publ	Udaipur	RA

Query 8: Drop the view publisher_name_A.

Solution-

drop view publisher_name_A;

Output- View Dropped.

Query 9: Create View pubcity_Kingston on publisher where publisher_city='Kingston' with read only constraint.

Solution-

create view pubcity_Kingston as select * from publisher where publisher_city='Kingston'with read only;

select * from pubcity_Kingston;

Output-

PUBLISHER_CODE	PUBLISHER_NAME	PUBLISHER_CITY	PUBLISHER_STATE
MP	McPherson and Co	Kingston	NY

Query 10: Update the publisher_name =' 'Excellence Publ' in view pubcity_Kingston where publisher_city='Kingston'.

Solution- If we will write following query, error will be generated as the view was created with the read only option, so no changes including insertions, updates and deletions can be made to the data inside view.

update pubcity_Kingston set publisher_name = 'Excellence Publ' where publisher_city = 'Kingston';

Output-

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ORA-01733: virtual column not allowed here
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Query 11: Drop the view pubcity_Kingston.

Solution-

drop view pubcity_Kingston;

Output- View Dropped.