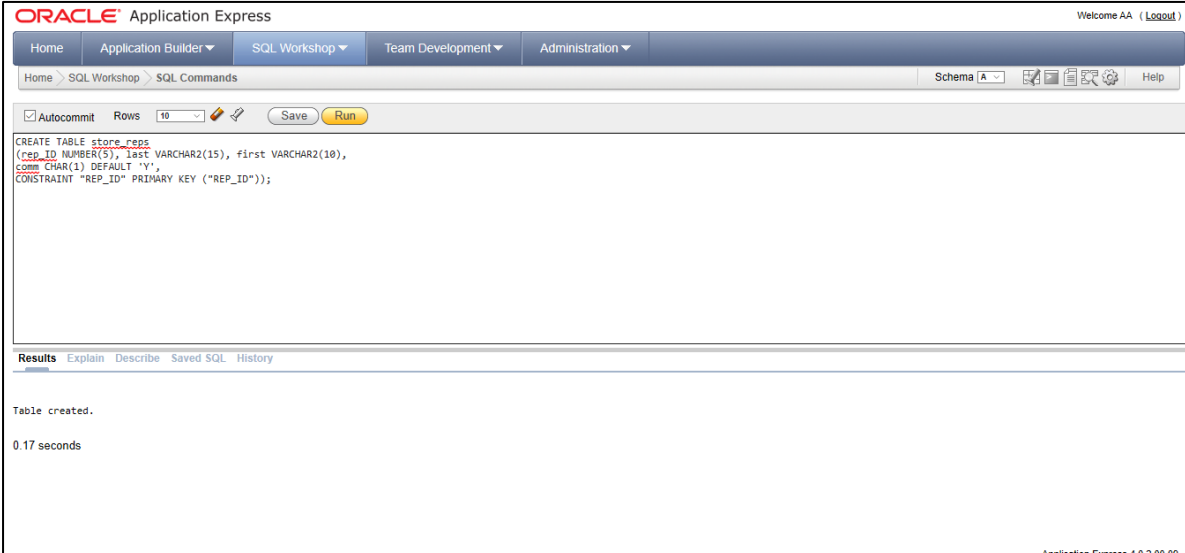


NURAMYRA NATASHA BINTI ISMALLUDIN  
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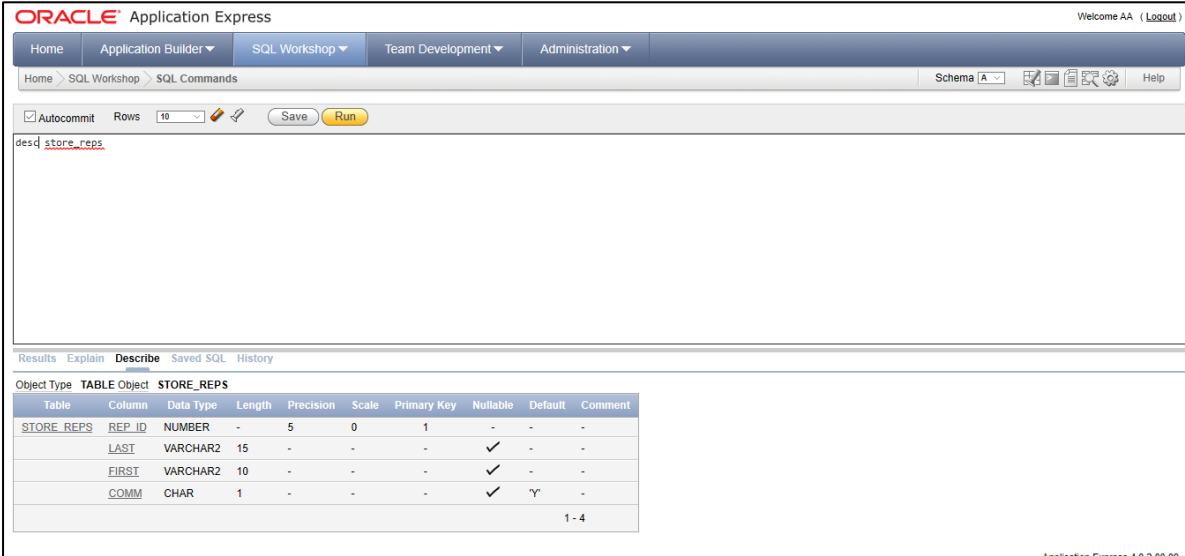
1. CREATE TABLE store\_reps  
(rep\_ID NUMBER(5), last VARCHAR2(15), first VARCHAR2(10), comm CHAR(1) DEFAULT 'Y',  
CONSTRAINT "REP\_ID" PRIMARY KEY ("REP\_ID"));



The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Administration'. The breadcrumb trail is 'Home > SQL Workshop > SQL Commands'. The main area contains the following SQL command:

```
CREATE TABLE store_reps  
(rep_ID NUMBER(5), last VARCHAR2(15), first VARCHAR2(10),  
comm CHAR(1) DEFAULT 'Y',  
CONSTRAINT "REP_ID" PRIMARY KEY ("REP_ID"));
```

Below the command, the 'Results' section shows the message 'Table created.' and the execution time '0.17 seconds'. The bottom right corner of the interface displays 'Application Express 4.0.2.00.09'.



The screenshot shows the Oracle Application Express interface with the 'Describe' tab selected. The breadcrumb trail is 'Home > SQL Workshop > SQL Commands'. The main area shows the text 'des| store\_reps'. Below this, the 'Describe' view displays the following table structure:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STORE_REPS	REP_ID	NUMBER	-	5	0	1	-	-	-
	LAST	VARCHAR2	15	-	-	-	✓	-	-
	FIRST	VARCHAR2	10	-	-	-	✓	-	-
	COMM	CHAR	1	-	-	-	✓	Y	-

The bottom right corner of the interface displays 'Application Express 4.0.2.00.09'.

- ALTER TABLE store\_reps  
MODIFY (first constraint store\_reps\_first NOT null, last constraint store\_reps\_last NOT null);

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A

Autocommit Rows 10 Save Run

```
ALTER TABLE store_reps
MODIFY (first constraint store_reps_first NOT null, last constraint store_reps_last NOT null);
```

---

Results Explain Describe Saved SQL History

Table altered.

0.13 seconds

Application Express 4.0.2.00.09

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A

Autocommit Rows 10 Save Run

```
desc store_reps
```

---

Results Explain Describe Saved SQL History

Object Type TABLE Object STORE\_REPS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STORE_REPS	REP_ID	NUMBER	-	5	0	1	-	-	-
	LAST	VARCHAR2	15	-	-	-	-	-	-
	FIRST	VARCHAR2	10	-	-	-	-	-	-
	COMM	CHAR	1	-	-	-	✓	Y	-
									1 - 4

Application Express 4.0.2.00.09

### 3. ALTER TABLE store\_reps ADD CONSTRAINT store\_reps\_comm\_ck CHECK(comm IN('Y','N'));

The screenshot shows the Oracle Application Express interface. The SQL Commands window contains the following text:

```
ALTER TABLE store_reps
ADD CONSTRAINT store_reps_comm_ck CHECK(comm IN('Y','N'));
```

Below the command window, the Results tab is selected, displaying the message "Table altered." and the execution time "0.04 seconds".

#### NOTES\*\*

- CONSTRAINT customers\_region\_ck CHECK (region IN ('N', 'NW', 'NE', 'S', 'SE', 'SW', 'W', 'E')) );

The screenshot shows the Oracle Application Express interface with the DESCRIBE command executed for the store\_reps table. The Results tab displays the following table structure:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STORE_REPS	REP_ID	NUMBER	-	5	0	1	-	-	-
	LAST	VARCHAR2	15	-	-	-	-	-	-
	FIRST	VARCHAR2	10	-	-	-	-	-	-
	COMM	CHAR	1	-	-	-	✓	Y	-

The table structure is displayed in a tabular format with columns for Table, Column, Data Type, Length, Precision, Scale, Primary Key, Nullable, Default, and Comment. The COMM column is highlighted in blue, indicating it is the primary key.

4. ALTER TABLE store\_reps
  - ADD (Base\_salary Number(7,2))
  - ADD CONSTRAINT store\_reps\_Base\_salary\_ck CHECK (Base\_salary>0);

The screenshot shows the Oracle Application Express interface. The SQL Command window contains the following command:

```
desc store_reps
```

The Results tab shows the following table structure:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STORE_REPS	REP_ID	NUMBER	-	5	0	1	-	-	-
	LAST	VARCHAR2	15	-	-	-	-	-	-
	FIRST	VARCHAR2	10	-	-	-	-	-	-
	COMM	CHAR	1	-	-	-	✓	Y	-
	BASE_SALARY	NUMBER	-	7	2	-	✓	-	-
									1-5

5. CREATE TABLE BOOK\_STORES
  - (Store\_ID Number(8),
  - Name VARCHAR2(30),
  - Contact VARCHAR2(10),
  - Rep\_ID VARCHAR2(5),
  - CONSTRAINT book\_stores\_ID\_pk PRIMARY KEY(Store\_ID),
  - CONSTRAINT book\_stores\_name\_uk UNIQUE(name));

The screenshot shows the Oracle Application Express interface. The SQL Command window contains the following command:

```
CREATE TABLE BOOK_STORES
(Store_ID Number(8),
Name VARCHAR2(30),
Contact VARCHAR2(10),
Rep_ID VARCHAR2(5),
CONSTRAINT book_stores_store_ID_pk PRIMARY KEY(Store_ID),
CONSTRAINT book_stores_name_uk UNIQUE(name));
```

The Results tab shows an error message:

```
ORA-00955: name is already used by an existing object
```

The execution time is 0.01 seconds.

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A

Autocommit Rows 10 Save Run

desc BOOK\_STORES

---

Results Explain Describe Saved SQL History

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BOOK_STORES	STORE_ID	NUMBER	-	8	0	1	-	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	CONTACT	VARCHAR2	30	-	-	-	✓	-	-
	REP_ID	VARCHAR2	5	-	-	-	✓	-	-
1-4									

Application Express 4.0.2.00.09

- ALTER TABLE book\_stores  
 MODIFY REP\_ID NUMBER(5)  
 ADD CONSTRAINT fk\_rep FOREIGN KEY(REP\_ID)  
 REFERENCES store\_reps(REP\_ID);

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A

Autocommit Rows 30 Save Run

```
ALTER TABLE book_stores
MODIFY REP_ID NUMBER(5)
ADD CONSTRAINT fk_rep FOREIGN KEY(REP_ID)
REFERENCES store_reps(REP_ID);
```

---

Results Explain Describe Saved SQL History

Table altered.

0.20 seconds

DESC book\_stores

Object Type TABLE Object BOOK\_STORES

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BOOK_STORES	STORE_ID	NUMBER	-	8	0	1	-	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	CONTACT	VARCHAR2	30	-	-	-	✓	-	-
	REP_ID	NUMBER	-	5	0	-	✓	-	-

1 - 4

## PART 2.

- 1) INSERT INTO ORDERS (ORDER#, CUSTOMER#, OrderDate)  
VALUES ('1021','1009',DATE'2009-07-20');

The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Administration'. The breadcrumb trail is 'Home > SQL Workshop > SQL Commands'. The 'Autocommit' checkbox is checked, and the 'Rows' dropdown is set to 50. The SQL command area contains the following SQL code:

```
CREATE TABLE Orders
(Order# NUMBER(4),
Customer# NUMBER(4),
OrderDate DATE NOT NULL,
ShipDate DATE,
ShipStreet VARCHAR2(18),
ShipCity VARCHAR2(15),
ShipState VARCHAR2(2),
ShipZip VARCHAR2(5),
ShipCost NUMBER(4,2),)
CONSTRAINT orders_order#_pk PRIMARY KEY(order#),
CONSTRAINT orders_customer#_fk FOREIGN KEY (customer#)
REFERENCES customers(customer#);
```

The Results pane shows the message 'Table created.' and the execution time '0.24 seconds'.

The screenshot shows the Oracle Application Express interface. The top navigation bar is the same as in the previous screenshot. The breadcrumb trail is 'Home > SQL Workshop > SQL Commands'. The 'Autocommit' checkbox is checked, and the 'Rows' dropdown is set to 10. The SQL command area contains the following SQL code:

```
INSERT INTO ORDERS (ORDER#, CUSTOMER#, OrderDate)
VALUES ('1021','1009',DATE'2009-07-20');
```

The Results pane shows the message '1 row(s) inserted.' and the execution time '0.00 seconds'.

- 2) INSERT INTO ORDERS (ORDER#, CUSTOMER#, OrderDate)  
VALUES ('1022','2000',DATE'2009-08-06');

Error: ORA-02291: integrity constraint (A.ORDERS\_CUSTOMER#\_FK) violated - parent key not found  
Because Foreign Key value has no matching with Primary Key value.

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A

Autocommit Rows: 10 Save Run

```
INSERT INTO ORDERS (ORDER#, CUSTOMER#, OrderDate)
VALUES ('1822', '2000', DATE '2009-08-08');
```

---

**Results** Explain Describe Saved SQL History

ORA-02291: integrity constraint (A.ORDERS\_CUSTOMER#\_FK) violated - parent key not found

0.01 seconds

Application Express 4.0.2.00.09

3) SELECT title, category  
 FROM BOOKS  
 WHERE category != 'FITNESS';

```
SELECT title, category
FROM BOOKS
WHERE category != 'FITNESS';
```

---

**Results** Explain Describe Saved SQL History

TITLE	CATEGORY
BUILDING A CAR WITH TOOTHPICKS	CHILDREN
COOKING WITH MUSHROOMS	COOKING
HANDCRANKED COMPUTERS	COMPUTER
PAINLESS CHILD-REARING	FAMILY LIFE
BIG BEAR AND LITTLE DOVE	CHILDREN
HOW TO GET FASTER PIZZA	SELF HELP
REVENGE OF MICKEY	FAMILY LIFE
DATABASE IMPLEMENTATION	COMPUTER
HOLY GRAIL OF ORACLE	COMPUTER
E-BUSINESS THE EASY WAY	COMPUTER
THE WOK WAY TO COOK	COOKING
HOW TO MANAGE THE MANAGER	BUSINESS
SHORTEST POEMS	LITERATURE

13 rows returned in 0.00 seconds [Download](#)

Application Express 4.0.2.00.09

Workspace: A User: AA Language: en | Copyright © 1999, 2010, Oracle. All rights reserved.

4) SELECT LastName, State  
 FROM Customers  
 WHERE State = 'GA' or State = 'NJ'  
 ORDER BY LastName asc

SELECT \* FROM Customers

Results Explain Describe Saved SQL History

CUSTOMER#	LASTNAME	FIRSTNAME	ADDRESS	CITY	STATE	ZIP	REFERRED	REGION	EMAIL
1001	MORALES	BONITA	P.O. BOX 651	EASTPOINT	FL	32328	-	SE	bm225@sat.net
1007	GIANA	TAMMY	9153 MAIN STREET	AUSTIN	TX	78710	1003	SW	treetop@zep.net
1012	MCKENZIE	WILLIAM	P.O. BOX 971	BOSTON	MA	02110	-	NE	will224@axe.net
1013	NGUYEN	NICHOLAS	357 WHITE EAGLE AVE.	CLERMONT	FL	34711	1006	SE	nguy33@sat.net
1018	MONTIASA	GREG	1008 GRAND AVENUE	MACON	GA	31206	-	SE	greg336@sat.net
1008	JONES	KENNETH	P.O. BOX 137	CHEYENNE	WY	82003	-	N	kenask@sat.net
1010	LUCAS	JAKE	114 EAST SAVANNAH	ATLANTA	GA	30314	-	SE	-
1011	MCGOVERN	REESE	P.O. BOX 18	CHICAGO	IL	60606	-	N	reesemc@sat.net
1014	LEE	JASMINE	P.O. BOX 2947	CODY	WY	82414	-	N	jaslee@sat.net
1015	SHELL	STEVE	P.O. BOX 677	MIAMI	FL	33111	-	SE	sschell3@sat.net
1016	DAUM	MICHELL	9851231 LONG ROAD	BURBANK	CA	91508	1010	W	-
1017	NELSON	BECCA	P.O. BOX 563	KALMAZOO	MI	49006	-	N	becca88@digis.com
1019	SMITH	JENNIFER	P.O. BOX 1151	MORRISTOWN	NJ	07962	1003	NE	-
1020	FALAH	KENNETH	P.O. BOX 335	TRENTON	NJ	08607	-	NE	Kfalah@sat.net
1002	THOMPSON	RYAN	P.O. BOX 9835	SANTA MONICA	CA	90404	-	W	-
1003	SMITH	LEILA	P.O. BOX 66	TALLAHASSEE	FL	32306	-	SE	-
1004	PIERSON	THOMAS	69821 SOUTH AVENUE	BOISE	ID	83707	-	NW	tpier55@sat.net
1005	GIRARD	CINDY	P.O. BOX 851	SEATTLE	WA	98115	-	NW	cing101@zep.net
1006	CRUZ	MESHIA	82 DIRT ROAD	ALBANY	NY	12211	-	NE	cruztop@axe.com
1009	PEREZ	JORGE	P.O. BOX 8564	BURBANK	CA	91510	1003	W	jperez@canet.com

20 rows returned in 0.00 seconds [Download](#)

ORACLE Application Express Welcome AA (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands Schema A Help

Autocommit Rows 10 Save Run

```
SELECT LastName, State
FROM Customers
WHERE State = 'GA' or State = 'NJ'
ORDER BY LastName asc
```

Results Explain Describe Saved SQL History

LASTNAME	STATE
FALAH	NJ
LUCAS	GA
MONTIASA	GA
SMITH	NJ

4 rows returned in 0.00 seconds [Download](#)

- 5) SELECT Order#, ShipDate  
 FROM ORDERS  
 WHERE ShipDate <= DATE'2009-04-01';

The screenshot shows the Oracle Application Express interface. The SQL Command window contains the following query:

```
SELECT Order#, ShipDate
FROM ORDERS
WHERE ShipDate <= DATE'2009-04-01';
```

The Results window displays the following data:

ORDER#	SHIPDATE
1007	04/04/0009
1001	04/01/2009
1002	04/01/2009
1003	04/01/2009

4 rows returned in 0.00 seconds

- 6) SELECT LName, FName  
 FROM AUTHOR  
 WHERE LName LIKE '%IN%'  
 ORDER BY LName, FName

The screenshot shows the Oracle Application Express interface. The SQL Command window contains the following query:

```
SELECT LName, FName
FROM AUTHOR
WHERE LName LIKE '%IN%'
ORDER BY LName, FName
```

The Results window displays the following data:

LNAME	FNAME
AUSTIN	JAMES
MARTINEZ	SHEILA
ROBINSON	ROBERT
WILKINSON	ANTHONY

4 rows returned in 0.00 seconds

- 7) SELECT retail, category, pubID  
 FROM books  
 WHERE category = 'COMPUTER' or category = 'FAMILY LIFE' or retail >='45.00';

Autocommit Rows 10 Save Run

```
SELECT retail, category, pubID
FROM books
WHERE category = 'COMPUTER' or category = 'FAMILY LIFE' or retail >='45.00';
```

Results Explain Describe Saved SQL History

RETAIL	CATEGORY	PUBID
59.95	CHILDREN	2
25	COMPUTER	3
89.95	FAMILY LIFE	5
22	FAMILY LIFE	1
55.95	COMPUTER	3
75.95	COMPUTER	3
54.5	COMPUTER	2

7 rows returned in 0.00 seconds [Download](#)