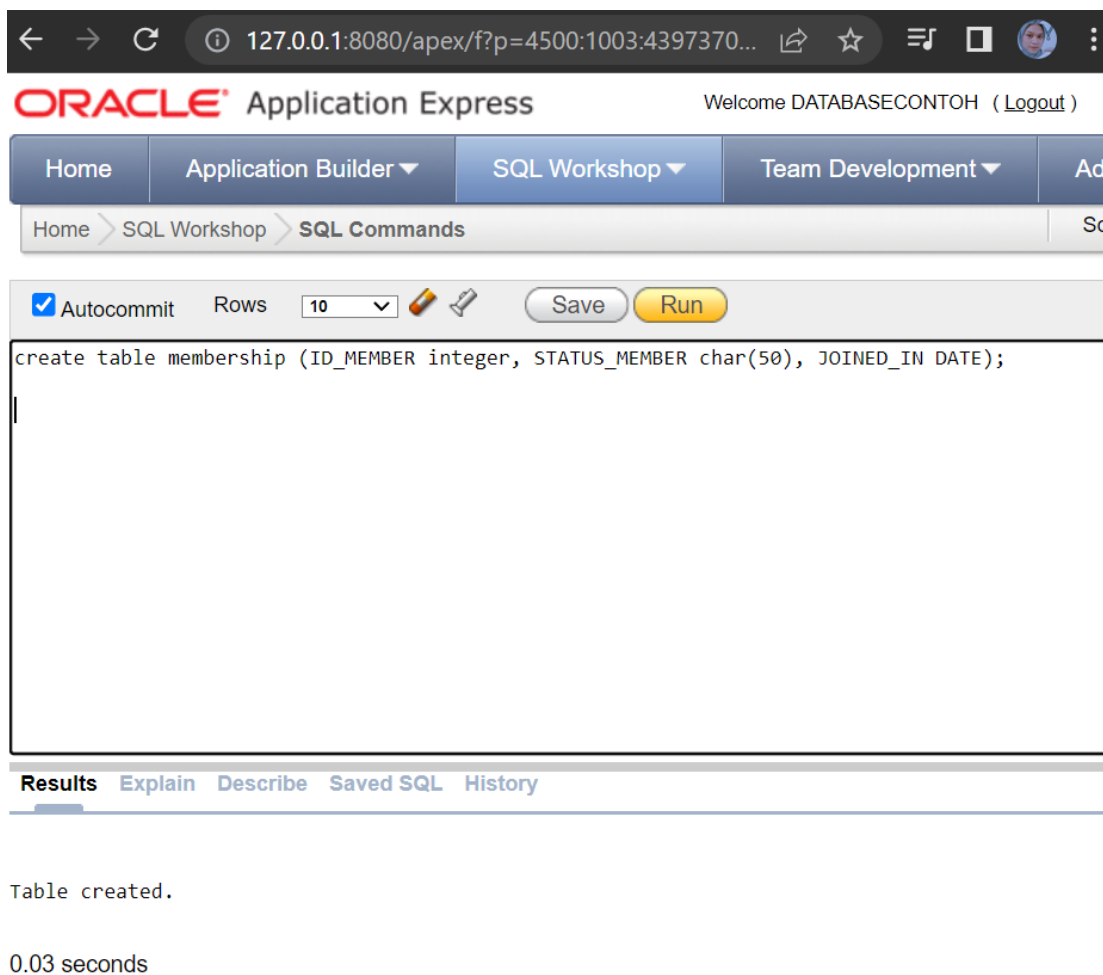


Nama : Zumro'atul Afifah  
Kelas : Basdat A  
NIM : 202110370311099

**A. Implementasikan beberapa contoh DDL berikut pada skema HR yang sudah kalian hubungkan :**

1. Buatlah tabel baru dengan nama MEMBERSHIP yang memiliki atribut sebagai berikut:
  - ID MEMBER sebagai Unique ID dan bertipe data integer.
  - STATUS MEMBER yang bertipe data string dengan panjang 50 karakter.
  - JOINED IN yang bertipe data date



The screenshot shows the Oracle Application Express interface. The browser address bar displays the URL `127.0.0.1:8080/apex/f?p=4500:1003:4397370...`. The page title is "ORACLE Application Express" and the user is logged in as "DATABASECONTOH". The navigation menu includes "Home", "Application Builder", "SQL Workshop", "Team Development", and "Ad". The breadcrumb trail shows "Home > SQL Workshop > SQL Commands". The "Autocommit" checkbox is checked, and the "Rows" dropdown is set to "10". The "Save" and "Run" buttons are visible. The SQL command entered in the text area is `create table membership (ID_MEMBER integer, STATUS_MEMBER char(50), JOINED_IN DATE);`. Below the text area, the "Results" tab is selected, showing the message "Table created." and the execution time "0.03 seconds".

➔ Melihat table berhasil dibuat gunakan command describe

ORACLE® Application Express

Home Application Builder SQL Workshop Team Development Administration

Home SQL Workshop SQL Commands

☒ Autocommit Rows 10 Save Run

describe membership

Results Explain Describe Saved SQL History

Object Type TABLE Object MEMBERSHIP

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MEMBERSHIP	ID_MEMBER	NUMBER	22	-	0	-	✓	-	-
	STATUS_MEMBER	CHAR	50	-	-	-	✓	-	-
	JOINED_IN	DATE	7	-	-	-	✓	-	-

1 - 3

- Ubah struktur tabel EMPLOYEES dengan menambahkan kolom baru bernama GENDER yang bertipe data string dengan panjang 1 karakter.

ORACLE® Application Express

Welcome DATABASECONTOH (Logout)

Home Application Builder SQL Workshop Team Development Administration

Home SQL Workshop SQL Commands

☒ Autocommit Rows 10 Save Run

describe employees

ALTER TABLE EMPLOYEES ADD GENDER char(1);

Results Explain Describe Saved SQL History

Table altered.

0.02 seconds

➔ Melihat hasil dari menambahkan kolom baru dengan command describe

The screenshot shows a SQL IDE interface. At the top, there's a toolbar with 'Autocommit' checked, 'Rows' set to 10, and 'Save' and 'Run' buttons. Below the toolbar, the SQL command area contains the following text:

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);  
  
DESCRIBE EMPLOYEES  
  
ALTER TABLE EMPLOYEES ADD GENDER CHAR(1);
```

Below the command area, there's a tabbed interface with 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Describe' tab is active, showing the following table structure for the 'EMPLOYEES' table:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default
EMPLOYEES	EMPLOYEE_ID	NUMBER	-	6	0	1	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	✓	-
	LAST_NAME	VARCHAR2	25	-	-	-	-	-
	EMAIL	VARCHAR2	25	-	-	-	-	-
	PHONE_NUMBER	VARCHAR2	20	-	-	-	✓	-
	HIRE_DATE	DATE	7	-	-	-	-	-
	JOB_ID	VARCHAR2	10	-	-	-	-	-
	SALARY	NUMBER	-	8	2	-	✓	-
	COMMISSION_PCT	NUMBER	-	2	2	-	✓	-
	MANAGER_ID	NUMBER	-	6	0	-	✓	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	✓	-
	GENDER	CHAR	1	-	-	-	✓	-

3. Modifikasi kolom DEPARTMENT\_NAME pada tabel DEPARTMENTS dengan nama DEPART\_NAME yang bertipe data string dengan panjang 150 karakter.
- ➔ Sebelum

☒ Autocommit
 Rows 10
Save Run

```

CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);

DESCRIBE DEPARTMENTS

ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
    
```

[Results](#)
[Explain](#)
[Describe](#)
[Saved SQL](#)
[History](#)

Object Type **TABLE** Object **DEPARTMENTS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nulla
<a href="#">DEPARTMENTS</a>	<a href="#">DEPARTMENT_ID</a>	NUMBER	-	4	0	1	-
	<a href="#">DEPART_NAME</a>	VARCHAR2	30	-	-	-	-
	<a href="#">MANAGER_ID</a>	NUMBER	-	6	0	-	✓
	<a href="#">LOCATION_ID</a>	NUMBER	-	4	0	-	✓

➔ Sesudah

☒ Autocommit   Rows     

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
```

```
DESCRIBE DEPARTMENTS
```

```
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
```

```
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Object Type **TABLE** Object **DEPARTMENTS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nulla
<u>DEPARTMENTS</u>	<u>DEPARTMENT_ID</u>	NUMBER	-	4	0	1	-
	<u>DEPART_NAME</u>	VARCHAR2	150	-	-	-	-
	<u>MANAGER_ID</u>	NUMBER	-	6	0	-	✓
	<u>LOCATION_ID</u>	NUMBER	-	4	0	-	✓

**B. Implementasikan beberapa contoh DML berikut pada skema HR yang sudah kalian hubungkan :**

1. Tunjukkan seluruh data yang ada pada masing-masing tabel.

- **JOB\_HISTORY**

Autocommit Rows 10 Save Run

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE JOB_HISTORY
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **JOB\_HISTORY**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nulla
JOB_HISTORY	EMPLOYEE_ID	NUMBER	-	6	0	1	-
	START_DATE	DATE	7	-	-	2	-
	END_DATE	DATE	7	-	-	-	-
	JOB_ID	VARCHAR2	10	-	-	-	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	✓

- **JOBS**

Home Application Builder SQL Workshop Team Development A

Home > SQL Workshop > SQL Commands

Autocommit Rows 10 Save Run

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE JOBS
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **JOBS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Defau
JOBS	JOB_ID	VARCHAR2	10	-	-	1	-	-
	JOB_TITLE	VARCHAR2	35	-	-	-	-	-
	MIN_SALARY	NUMBER	-	6	0	-	✓	-
	MAX_SALARY	NUMBER	-	6	0	-	✓	-

## - DEPARTEMENTS

☒ Autocommit   Rows: 10    

```

CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE DEPARTMENTS
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);

```

Results Explain **Describe** Saved SQL History

Object Type **TABLE** Object **DEPARTMENTS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Null
DEPARTMENTS	DEPARTMENT_ID	NUMBER	-	4	0	1	-
	DEPART_NAME	VARCHAR2	150	-	-	-	-
	MANAGER_ID	NUMBER	-	6	0	-	✓
	LOCATION_ID	NUMBER	-	4	0	-	✓

## - EMPLOYEES

☒ Autocommit   Rows: 10    

```

CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE EMPLOYEES
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);

```

Results Explain **Describe** Saved SQL History

Object Type **TABLE** Object **EMPLOYEES**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Null
EMPLOYEES	EMPLOYEE_ID	NUMBER	-	6	0	1	-
	FIRST_NAME	VARCHAR2	20	-	-	-	✓
	LAST_NAME	VARCHAR2	25	-	-	-	-
	EMAIL	VARCHAR2	25	-	-	-	-
	PHONE_NUMBER	VARCHAR2	20	-	-	-	✓
	HIRE_DATE	DATE	7	-	-	-	-
	JOB_ID	VARCHAR2	10	-	-	-	-
	SALARY	NUMBER	-	8	2	-	✓

## - LOCATIONS

☒ Autocommit
 Rows 10
Save Run

```

CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE LOCATIONS;
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
    
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **LOCATIONS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
LOCATIONS	LOCATION_ID	NUMBER	-	4	0	1	-
	STREET_ADDRESS	VARCHAR2	40	-	-	-	✓
	POSTAL_CODE	VARCHAR2	12	-	-	-	✓
	CITY	VARCHAR2	30	-	-	-	-
	STATE_PROVINCE	VARCHAR2	25	-	-	-	✓
	COUNTRY_ID	CHAR	2	-	-	-	✓

## - COUNTRIES

Home > SQL Workshop > SQL Commands

☒ Autocommit
 Rows 10
Save Run

```

CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE COUNTRIES;
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
    
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **COUNTRIES**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
COUNTRIES	COUNTRY_ID	CHAR	2	-	-	1	-
	COUNTRY_NAME	VARCHAR2	40	-	-	-	✓
	REGION_ID	NUMBER	22	-	-	-	✓

Workspace: HR User: SYSTEM



- REGIONS

Home > SQL Workshop > SQL Commands

☒ Autocommit Rows: 10 Save Run

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE REGIONS
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
```

Results Explain Describe Saved SQL History

Object Type: TABLE Object: REGIONS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
REGIONS	REGION_ID	NUMBER	22	-	-	1	-
	REGION_NAME	VARCHAR2	25	-	-	-	✓

2. Tambahkan data pada kolom EMPLOYEE\_ID, FIRST\_NAME, dan LAST\_NAME yang ada pada tabel EMPLOYEES dan biarkan kolom lainnya kosong (tidak perlu mengisi apapun termasuk (-))

ORACLE Application Express

Home Application Builder SQL Workshop Team Development Administration

Home > SQL Workshop > SQL Commands

☒ Autocommit Rows: 200 Save Run

```
CREATE TABLE MEMBERSHIP (ID_MEMBER INTEGER, STATUS_MEMBER CHAR(50), JOINED_ID DATE);
DESCRIBE EMPLOYEES
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);
INSERT INTO EMPLOYEES (EMPLOYEE_ID, LAST_NAME, EMAIL, HIRE_DATE, JOB_ID) VALUES (207, 'AUSTIN', 'HEAA', '06/17/2003', 'AD_PRES');
SELECT * FROM EMPLOYEES;
```

Results Explain Describe Saved SQL History

1 row(s) inserted.



0.00 seconds

3. Tambahkan data apapun pada tabel JOBS sebanyak 3 data.

## ORACLE® Application Express

[Home](#) [Application Builder ▼](#) [SQL Workshop ▼](#) [Team Development ▼](#) [Administration ▼](#)

Home > SQL Workshop > **SQL Commands**

☒ Autocommit Rows    [Save](#) [Run](#)

```
ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;  
ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);  
SELECT * from jobs;  
describe jobs  
INSERT INTO JOBS (JOB_ID, JOB_TITLE, MIN_SALARY, MAX_SALARY) VALUES ('DVP', 'DEVELOPER', 15000, 20000);  
INSERT INTO JOBS (JOB_ID, JOB_TITLE, MIN_SALARY, MAX_SALARY) VALUES ('MNG', 'MANAGER', 10000, 21000);  
INSERT INTO JOBS (JOB_ID, JOB_TITLE, MIN_SALARY, MAX_SALARY) VALUES ('HCR', 'HACKER', 19000, 28000);
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

1 row(s) inserted.

0.01 seconds

## ➔ Menampilkan Data

```
SELECT * from jobs;
```

```
describe jobs
```

```
INSERT INTO JOBS (JOB_ID, JOB_TITLE, MIN_SALARY, MAX_SALARY) VALUES ('DVP', 'DEVELOPER', 15000, 20000);
```

```
INSERT INTO JOBS (JOB_ID, JOB_TITLE, MIN_SALARY, MAX_SALARY) VALUES ('MNG', 'MANAGER', 10000, 21000);
```

**Results** Explain Describe Saved SQL History

JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY
AD_PRES	President	20080	40000
AD_VP	Administration Vice President	15000	30000
AD_ASST	Administration Assistant	3000	6000
FI_MGR	Finance Manager	8200	16000
FI_ACCOUNT	Accountant	4200	9000
AC_MGR	Accounting Manager	8200	16000
AC_ACCOUNT	Public Accountant	4200	9000
SA_MAN	Sales Manager	10000	20080
SA_REP	Sales Representative	6000	12008
PU_MAN	Purchasing Manager	8000	15000
PU_CLERK	Purchasing Clerk	2500	5500
ST_MAN	Stock Manager	5500	8500
ST_CLERK	Stock Clerk	2008	5000
SH_CLERK	Shipping Clerk	2500	5500
IT_PROG	Programmer	4000	10000
MK_MAN	Marketing Manager	9000	15000
MK_REP	Marketing Representative	4000	9000
HR_REP	Human Resources Representative	4000	9000
PR_REP	Public Relations Representative	4500	10500
DVP	DEVELOPER	15000	20000
MNG	MANAGER	10000	21000
HCR	HACKER	19000	28000

#### 4. Ubah ID pada baris ketiga tabel EMPLOYEES

**ORACLE** Application Express Welcome SYSTEM ( [Logout](#) )

[Home](#) [Application Builder](#) [SQL Workshop](#) [Team Development](#) [Ad](#)

[Home](#) > [SQL Workshop](#) > **SQL Commands**

☒ Autocommit Rows  [Save](#) [Run](#)

```
DESCRIBE EMPLOYEES

ALTER TABLE DEPARTMENTS RENAME COLUMN DEPARTMENT_NAME TO DEPART_NAME;

ALTER TABLE DEPARTMENTS MODIFY DEPART_NAME VARCHAR(150);

SELECT * from EMPLOYEES;

SELECT EMPLOYEE_ID, JOB_ID, MANAGER_ID FROM EMPLOYEES;

UPDATE EMPLOYEES
SET LAST_NAME = 'AUSTIN', HIRE_DATE = '10/07/2003', JOB_ID = 'AD_PRES'
WHERE EMPLOYEE_ID = '207';
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

1 row(s) updated.

0.02 seconds

206	William	Gietz	WGIEZ	515.123.8181	06/07/2002	AC_ACCOUNT	8300	-	205	110	-
207	-	AUSTIN	HEAA	-	10/07/2003	AD_PRES	-	-	-	-	-

108 rows returned in 0.00 seconds

[Download](#)

5. Hapus data yang ada pada baris genap pada tabel EMPLOYEES.

```
DELETE FROM EMPLOYEES WHERE EMPLOYEE_ID = '206';
```

**Results** Explain Describe Saved SQL History

1 row(s) deleted.

0.01 seconds

205	Shelley	Higgins	SHIGGINS	515.123.8080	06/07/2002	Ac
207	-	AUSTIN	HEAA	-	10/07/2003	Al

107 rows returned in 0.01 seconds [Download](#)