1. Buat tabel


```
Database changed
MariaDB [data_pegawai]> create table pegawai(idpegawai char(6) not null default '',
    -> namadepan varchar(20),
    -> namabelakang varchar(25) not null default '',
    -> email varchar(25) not null default '',
    -> telepon varchar(20),
    -> tglkontrak date not null,
    -> idjob varchar(10) not null default '',
    -> gaji int(8),
    -> tunjangan int(8),
    -> idmanajer char(6),
    -> iddepartemen char(4));
Query OK, 0 rows affected (0.470 sec)

MariaDB [data_pegawai]> desc pegawai;
```

Field	Type	Null	Key	Default	Extra
idpegawai	char(6)	NO			
namadepan	varchar(20)	YES		NULL	
namabelakang	varchar(25)	NO			
email	varchar(25)	NO			
telepon	varchar(20)	YES		NULL	
tglkontrak	date	NO		NULL	
idjob	varchar(10)	NO			
gaji	int(8)	YES		NULL	
tunjangan	int(8)	YES		NULL	
idmanajer	char(6)	YES		NULL	
iddepartemen	char(4)	YES		NULL	

```
11 rows in set (0.016 sec)

MariaDB [data_pegawai]>
```

2. Isi tabel dari data

idjob	varchar(10)	NO		
gaji	int(8)	YES		NULL
tunjangan	int(8)	YES		NULL
idmanajer	char(6)	YES		NULL
iddepartemen	char(4)	YES		NULL

```
11 rows in set (0.017 sec)

MariaDB [data_pegawai]> insert into pegawai values('E001','ferry','gustiawan','ferry@yahoo.com','07117059004','2005-09-01','L0001',5000000,500000,'al','com1'),
    -> ('E002','aris','ganiardi','aris@yahoo.com','081312345678','2006-09-01','L0002',2000000,200000,'hs','com1'),
    -> ('E003','faiz','ahmad','faiz@yahoo.com','081367384322','2006-10-01','L0003',1500000,0,'bx','com1'),
    -> ('E004','emma','hunton','emma@gmail.com','081363484342','2006-10-01','L0004',1500000,0,'cx','com1'),
    -> ('E005','nike','scoff','nike@plasa.com','08163454555','2007-09-01','L0005',1250000,0,'dx','com1');
Query OK, 5 rows affected (0.056 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [data_pegawai]> select * from pegawai;
```

idpegawai	namadepan	namabelakang	email	telepon	tglkontrak	idjob	gaji	tunjangan	idmanajer	iddepartemen
E001	ferry	gustiawan	ferry@yahoo.com	07117059004	2005-08-01	L0001	2000000	500000	al	com
E001	ferry	gustiawan	ferry@yahoo.com	07117059004	2005-09-01	L0001	5000000	500000	al	com1
E002	aris	ganiardi	aris@yahoo.com	081312345678	2006-09-01	L0002	2000000	200000	hs	com1
E003	faiz	ahmad	faiz@yahoo.com	081367384322	2006-10-01	L0003	1500000	0	bx	com1
E004	emma	hunton	emma@gmail.com	081363484342	2006-10-01	L0004	1500000	0	cx	com1
E005	nike	scoff	nike@plasa.com	08163454555	2007-09-01	L0005	1250000	0	dx	com1

```
6 rows in set (0.055 sec)

MariaDB [data_pegawai]>
```

3. Nomor 3,4,5

```
Command Prompt - mysql -u root
    -> ('E005','nike','scoff','nike@plasa.com','08163454555','2007-09-01','L0005',1250000,0,'dx','com1');
Query OK, 5 rows affected (0.056 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [data_pegawai]> select * from pegawai;
+----------+-----------+-------------+----------------+-------------+------------+-------+---------+-----------+-----------+-------------+
| idpegawai| namadepan | namabelakang| email          | telepon     | tglkontrak | idjob | gaji    | tunjangan | idmanajer | iddepartemen|
+----------+-----------+-------------+----------------+-------------+------------+-------+---------+-----------+-----------+-------------+
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004 | 2005-08-01 | L0001 | 2000000 |    500000 | al        | com         |
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004 | 2005-09-01 | L0001 | 5000000 |    500000 | al        | com1        |
| E002     | aris      | ganiardi    | aris@yahoo.com | 081312345678| 2006-09-01 | L0002 | 2000000 |    200000 | hs        | com1        |
| E003     | faiz      | ahmad       | faiz@yahoo.com | 081367384322| 2006-10-01 | L0003 | 1500000 |         0 | bx        | com1        |
| E004     | emma      | hunton      | emma@gmail.com | 081363484342| 2006-10-01 | L0004 | 1500000 |         0 | cx        | com1        |
| E005     | nike      | scoff       | nike@plasa.com | 08163454555 | 2007-09-01 | L0005 | 1250000 |         0 | dx        | com1        |
+----------+-----------+-------------+----------------+-------------+------------+-------+---------+-----------+-----------+-------------+
6 rows in set (0.055 sec)

MariaDB [data_pegawai]> select idpegawai,namabelakang,gaji from pegawai;
+----------+-------------+---------+
| idpegawai| namabelakang| gaji    |
+----------+-------------+---------+
| E001     | gustiawan   | 2000000 |
| E001     | gustiawan   | 5000000 |
| E002     | ganiardi    | 2000000 |
| E003     | ahmad       | 1500000 |
| E004     | hunton      | 1500000 |
| E005     | scoff       | 1250000 |
+----------+-------------+---------+
6 rows in set (0.001 sec)

MariaDB [data_pegawai]> select idpegawai,namabelakang,gaji,tunjangan,tunjangan+gaji from pegawai;
+----------+-------------+---------+-----------+----------------+
| idpegawai| namabelakang| gaji    | tunjangan | tunjangan+gaji |
+----------+-------------+---------+-----------+----------------+
| E001     | gustiawan   | 2000000 |    500000 |        2500000 |
| E001     | gustiawan   | 5000000 |    500000 |        5500000 |
| E002     | ganiardi    | 2000000 |    200000 |        2200000 |
| E003     | ahmad       | 1500000 |         0 |        1500000 |
| E004     | hunton      | 1500000 |         0 |        1500000 |
| E005     | scoff       | 1250000 |         0 |        1250000 |
+----------+-------------+---------+-----------+----------------+
6 rows in set (0.061 sec)

MariaDB [data_pegawai]>
```

4. Nomor 6 dan 7

```
MariaDB [data_pegawai]> update pegawai set tunjangan= null where idpegawai='E003';
Query OK, 1 row affected (0.115 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [data_pegawai]> select idpegawai,namabelakang,gaji,tunjangan,tunjangan+gaji from pegawai;
+----------+-------------+---------+-----------+----------------+
| idpegawai| namabelakang| gaji    | tunjangan | tunjangan+gaji |
+----------+-------------+---------+-----------+----------------+
| E001     | gustiawan   | 2000000 |    500000 |        2500000 |
| E001     | gustiawan   | 5000000 |    500000 |        5500000 |
| E002     | ganiardi    | 2000000 |    200000 |        2200000 |
| E003     | ahmad       | 1500000 |      NULL |           NULL |
| E004     | hunton      | 1500000 |         0 |        1500000 |
| E005     | scoff       | 1250000 |         0 |        1250000 |
+----------+-------------+---------+-----------+----------------+
6 rows in set (0.001 sec)

MariaDB [data_pegawai]> select idpegawai,namabelakang,gaji,tunjangan,tunjangan+gaji as total_pendapatan from pegawai;
+----------+-------------+---------+-----------+------------------+
| idpegawai| namabelakang| gaji    | tunjangan | total_pendapatan |
+----------+-------------+---------+-----------+------------------+
| E001     | gustiawan   | 2000000 |    500000 |          2500000 |
| E001     | gustiawan   | 5000000 |    500000 |          5500000 |
| E002     | ganiardi    | 2000000 |    200000 |          2200000 |
| E003     | ahmad       | 1500000 |      NULL |             NULL |
| E004     | hunton      | 1500000 |         0 |          1500000 |
| E005     | scoff       | 1250000 |         0 |          1250000 |
+----------+-------------+---------+-----------+------------------+
6 rows in set (0.057 sec)

MariaDB [data_pegawai]>
```

5. Nomor 8

```
| E001    | gustiawan | 5000000 |  500000 |  5500000 |
| E002    | ganiardi  | 2000000 |  200000 |  2200000 |
| E003    | ahmad     | 1500000 |    NULL |     NULL |
| E004    | hunton    | 1500000 |       0 |  1500000 |
| E005    | scoff     | 1250000 |       0 |  1250000 |
6 rows in set (0.057 sec)

MariaDB [data_pegawai]> insert into pegawai values('E006','lincoln','burrows','line@yahoo.com','085275384544','2008-09-01','L006',1750000,null,'ex','com1');
Query OK, 1 row affected (0.101 sec)

MariaDB [data_pegawai]> select * from pegawai;
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
| idpegawai| namadepan | namabelakang| email          | telepon      | tglkontrak | idjob | gaji    | tunjangan| idmanajer| iddepartemen|
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004  | 2005-08-01 | L0001 | 2000000 |   500000 | al       | com         |
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004  | 2005-09-01 | L0001 | 5000000 |   500000 | al       | com1        |
| E002     | aris      | ganiardi    | aris@yahoo.com | 081312345678 | 2006-09-01 | L0002 | 2000000 |   200000 | hs       | com1        |
| E003     | faiz      | ahmad       | faiz@yahoo.com | 081367384322 | 2006-10-01 | L0003 | 1500000 |     NULL | bx       | com1        |
| E004     | emma      | hunton      | emma@gmail.com | 081363484342 | 2006-10-01 | L0004 | 1500000 |        0 | cx       | com1        |
| E005     | nike      | scoff       | nike@plasa.com | 08163454555  | 2007-09-01 | L0005 | 1250000 |        0 | dx       | com1        |
| E006     | lincoln   | burrows     | line@yahoo.com | 085275384544 | 2008-09-01 | L006  | 1750000 |     NULL | ex       | com1        |
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
7 rows in set (0.001 sec)
```

6. Nomor 9

```
MariaDB [data_pegawai]> update pegawai set idmanajer='al' where idmanajer='E004'or idmanajer='E005';
Query OK, 0 rows affected (0.001 sec)
Rows matched: 0  Changed: 0  Warnings: 0

MariaDB [data_pegawai]> select * from pegawai;
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
| idpegawai| namadepan | namabelakang| email          | telepon      | tglkontrak | idjob | gaji    | tunjangan| idmanajer| iddepartemen|
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004  | 2005-08-01 | L0001 | 2000000 |   500000 | al       | com         |
| E001     | ferry     | gustiawan   | ferry@yahoo.com| 07117059004  | 2005-09-01 | L0001 | 5000000 |   500000 | al       | com1        |
| E002     | aris      | ganiardi    | aris@yahoo.com | 081312345678 | 2006-09-01 | L0002 | 2000000 |   200000 | hs       | com1        |
| E003     | faiz      | ahmad       | faiz@yahoo.com | 081367384322 | 2006-10-01 | L0003 | 1500000 |     NULL | bx       | com1        |
| E004     | emma      | hunton      | emma@gmail.com | 081363484342 | 2006-10-01 | L0004 | 1500000 |        0 | al       | com1        |
| E005     | nike      | scoff       | nike@plasa.com | 08163454555  | 2007-09-01 | L0005 | 1250000 |        0 | al       | com1        |
| E006     | lincoln   | burrows     | line@yahoo.com | 085275384544 | 2008-09-01 | L006  | 1750000 |     NULL | ex       | com1        |
+----------+-----------+-------------+----------------+--------------+------------+-------+---------+----------+----------+-------------+
7 rows in set (0.001 sec)

MariaDB [data_pegawai]>
```

7. Nomor 10,11,12

```
+-----------+
4 rows in set (0.001 sec)

MariaDB [data_pegawai]> select idmanajer from pegawai;
+-----------+
| idmanajer |
+-----------+
| al        |
| al        |
| hs        |
| bx        |
| al        |
| al        |
| ex        |
+-----------+
7 rows in set (0.001 sec)

MariaDB [data_pegawai]> select idmanajer from pegawai where idmanajer='al';
+-----------+
| idmanajer |
+-----------+
| al        |
| al        |
| al        |
| al        |
+-----------+
4 rows in set (0.001 sec)

MariaDB [data_pegawai]> select distinct pegawai where idmanajer;
ERROR 1054 (42S22): Unknown column 'pegawai' in 'field list'
MariaDB [data_pegawai]> select distinct idmanajer from pegawai;;
+-----------+
| idmanajer |
+-----------+
| al        |
| hs        |
| bx        |
| ex        |
+-----------+
4 rows in set (0.070 sec)
```

8. Nomor 13,14,15

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> use data_pegawai;
Database changed
MariaDB [data_pegawai]> select * from pegawai where gaji>=1250000 and gaji<=1750000;
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| idpegawai | namadepan | namabelakang | email          | telepon      | tglkontrak | idjob | gaji    | tunjangan | idmanajer | iddepartemen |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| E003      | faiz      | ahmad      | faiz@yahoo.com   | 081367384322 | 2006-10-01 | L0003 | 1500000 |      NULL | bx        | com1        |
| E004      | emma      | hunton     | emma@gmail.com   | 081363484342 | 2006-10-01 | L0004 | 1500000 |         0 | al        | com1        |
| E005      | nike      | scoff      | nike@plasa.com   | 08163454555  | 2007-09-01 | L0005 | 1250000 |         0 | al        | com1        |
| E006      | lincoln   | burrows    | line@yahoo.com   | 085275384544 | 2008-09-01 | L006  | 1750000 |      NULL | ex        | com1        |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
4 rows in set (0.001 sec)

MariaDB [data_pegawai]> select * from pegawai order by namabelakang asc;
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| idpegawai | namadepan | namabelakang | email          | telepon      | tglkontrak | idjob | gaji    | tunjangan | idmanajer | iddepartemen |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| E003      | faiz      | ahmad      | faiz@yahoo.com   | 081367384322 | 2006-10-01 | L0003 | 1500000 |      NULL | bx        | com1        |
| E006      | lincoln   | burrows    | line@yahoo.com   | 085275384544 | 2008-09-01 | L006  | 1750000 |      NULL | ex        | com1        |
| E002      | aris      | ganiardi   | aris@yahoo.com   | 081312345678 | 2006-09-01 | L0002 | 2000000 |    200000 | hs        | com1        |
| E001      | ferry     | gustiawan  | ferry@yahoo.com  | 07117059004  | 2005-08-01 | L0001 | 2000000 |    500000 | al        | com         |
| E001      | ferry     | gustiawan  | ferry@yahoo.com  | 07117059004  | 2005-09-01 | L0001 | 5000000 |    500000 | al        | com1        |
| E004      | emma      | hunton     | emma@gmail.com   | 081363484342 | 2006-10-01 | L0004 | 1500000 |         0 | al        | com1        |
| E005      | nike      | scoff      | nike@plasa.com   | 08163454555  | 2007-09-01 | L0005 | 1250000 |         0 | al        | com1        |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
7 rows in set (0.001 sec)

MariaDB [data_pegawai]> select * from pegawai order by namabelakang desc;
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| idpegawai | namadepan | namabelakang | email          | telepon      | tglkontrak | idjob | gaji    | tunjangan | idmanajer | iddepartemen |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
| E005      | nike      | scoff      | nike@plasa.com   | 08163454555  | 2007-09-01 | L0005 | 1250000 |         0 | al        | com1        |
| E004      | emma      | hunton     | emma@gmail.com   | 081363484342 | 2006-10-01 | L0004 | 1500000 |         0 | al        | com1        |
| E001      | ferry     | gustiawan  | ferry@yahoo.com  | 07117059004  | 2005-08-01 | L0001 | 2000000 |    500000 | al        | com         |
| E001      | ferry     | gustiawan  | ferry@yahoo.com  | 07117059004  | 2005-09-01 | L0001 | 5000000 |    500000 | al        | com1        |
| E002      | aris      | ganiardi   | aris@yahoo.com   | 081312345678 | 2006-09-01 | L0002 | 2000000 |    200000 | hs        | com1        |
| E006      | lincoln   | burrows    | line@yahoo.com   | 085275384544 | 2008-09-01 | L006  | 1750000 |      NULL | ex        | com1        |
| E003      | faiz      | ahmad      | faiz@yahoo.com   | 081367384322 | 2006-10-01 | L0003 | 1500000 |      NULL | bx        | com1        |
+----------+-----------+------------+------------------+--------------+------------+-------+---------+-----------+-----------+-------------+
7 rows in set (0.001 sec)
```