

## **Modul Praktikum**

“Data Base”

Diajukan untuk memenuhi tugas data base



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**BANDUNG**

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## Latihan 1

1. Buat database dengan nama dbOryn
2. Buat dua tabel sbb :
  - a. Tabel tbMarketing (untuk mencatat data marketing)

```
MariaDB [dbOryn]> desc tbmarketing;
```

Field	Type	Null	Key	Default	Extra
NoID	char(4)	NO	PRI	NULL	
Nama	varchar(20)	NO		NULL	
NoHP	varchar(12)	NO		NULL	
Alamat	varchar(20)	NO		NULL	

4 rows in set (0.007 sec)

- b. Tabel tbJual (untuk mencatat penjualan barang)

```
MariaDB [dbOryn]> desc tbjual;
```

Field	Type	Null	Key	Default	Extra
NoJual	char(4)	NO	PRI	NULL	
NoID	char(4)	NO		NULL	
TglJual	date	NO		NULL	
Quantity	smallint(3)	NO		NULL	

4 rows in set (0.007 sec)

3. Isikan data pada tabel seperti berikut :

tbMarketing

```
MariaDB [dbOryn]> insert into tbmarketing
-> (Noid, Nama, Nohp, alamat)
-> values
-> ("M004", "Wijiyanto", "081393837360", "Tipes Solo"),
-> ("M005", "Sri Sumarlinda", "081999555222", "Colomadu Solo");
Query OK, 2 rows affected (0.104 sec)
Records: 2 Duplicates: 0 Warnings: 0

MariaDB [dbOryn]> select * from tbmarket;
ERROR 1146 (42S02): Table 'dboryn.tbmarket' doesn't exist
MariaDB [dbOryn]> select * from tbmarketing;
```

NoID	Nama	NoHP	Alamat
M001	Dwi Apri Setyorini	081888777666	Gumpang Kartasura
M002	Pipin Widyaningsih	08155566677	Gebyok Kartasura
M003	Haryanto	081222333444	Gedongan Solo
M004	Wijiyanto	081393837360	Tipes Solo
M005	Sri Sumarlinda	081999555222	Colomadu Solo

5 rows in set (0.000 sec)

tbJual

```
MariaDB [dbOryn]> insert into tbmarketing
-> (NoJual, NoID, TglJual, Quantity)
-> values
-> ("J0001","M001","2010-01-13","25"),
-> ("J0002","M002","2010-01-13","20"),
-> ("J0003","M004","2010-01-13","30"),
-> ("J0004","M006","2010-01-13","15");
ERROR 1054 (42S22): Unknown column 'NoJual' in 'field list'
MariaDB [dbOryn]> desc tbjual
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NoJual | char(4) | NO | PRI | NULL | |
| NoID | char(4) | NO | | NULL | |
| TglJual | date | NO | | NULL | |
| Quantity | smallint(3) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.009 sec)

MariaDB [dbOryn]> insert into tbjual
-> (NoJual, NoID, TglJual, Quantity)
-> values
-> ("J0001","M001","2010-01-13","25"),
-> ("J0002","M002","2010-01-13","20"),
```

4. Menampilkan NoJual, NoID, Nama, TglJual dan Quantity, tentunya dengan menggunakan relasi. Berikut perintah SQL yang digunakan:

```
-> where tbmarketing.noid=tbjual.noid;
+-----+-----+-----+-----+-----+-----+
| NoJual | noid | nama | tgljual | quantity |
+-----+-----+-----+-----+-----+
| J001 | M001 | Dwi Apri Setyorini | 2010-01-13 | 25 |
| J002 | M002 | Pipin Widyaningsih | 2010-01-13 | 20 |
| J003 | M004 | Wijiyanto | 2010-01-13 | 30 |
+-----+-----+-----+-----+-----+
3 rows in set (0.134 sec)
```

Penggunaan left join dan natural join

```
MariaDB [dbOryn]> select * from tbmarketing left join tbjual
-> on tbmarketing.NoID=tbjual.NoID;
+-----+-----+-----+-----+-----+-----+-----+
| NoID | Nama | NoHP | Alamat | NoJual | NoID | TglJual | Quantity |
+-----+-----+-----+-----+-----+-----+-----+
| M001 | Dwi Apri Setyorini | 081888777666 | Gumpang Kartasura | J001 | M001 | 2010-01-13 | 25 |
| M002 | Pipin Widyaningsih | 08155566677 | Gebyok Kartasura | J002 | M002 | 2010-01-13 | 20 |
| M004 | Wijiyanto | 081393837360 | Tipes Solo | J003 | M004 | 2010-01-13 | 30 |
| M003 | Haryanto | 081222333444 | Gedongan Solo | NULL | NULL | NULL | NULL |
| M005 | Sri Sumarlinda | 081999555222 | Colomadu Solo | NULL | NULL | NULL | NULL |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.068 sec)

MariaDB [dbOryn]> select * from tbmarketing natural join tbjual;
+-----+-----+-----+-----+-----+-----+
| NoID | Nama | NoHP | Alamat | NoJual | TglJual | Quantity |
+-----+-----+-----+-----+-----+-----+
| M001 | Dwi Apri Setyorini | 081888777666 | Gumpang Kartasura | J001 | 2010-01-13 | 25 |
| M002 | Pipin Widyaningsih | 08155566677 | Gebyok Kartasura | J002 | 2010-01-13 | 20 |
| M004 | Wijiyanto | 081393837360 | Tipes Solo | J003 | 2010-01-13 | 30 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.025 sec)
```

## Latihan Praktikum

1. Buka database dbKursus

```
MariaDB [dbOryn]> use dbkursus
Database changed
MariaDB [dbkursus]> select * from mahasiswa;
```

2. Tambahkan :

- Tabel Tutor untuk menyimpan data Tutor yang mengajar

```
at line 1
MariaDB [dbkursus]> desc tutor
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Nama_tutor | varchar(20) | NO   |     | NULL    |       |
| jnskursus  | varchar(30) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.007 sec)
```

- Tabel Jenis untuk menyimpan jenis kursus yang ditawarkan

```
MariaDB [dbkursus]> desc kursus;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| data  | varchar(20) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.009 sec)
```

- **Tabel** Transaksi untuk menyimpan transaksi pembayaran kursus

```
MariaDB [dbkursus]> desc transaksi;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| jnskursus  | varchar(50) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.005 sec)
```

3. Tampilkan Data peserta beserta Jenis kursus yang diambil

```
MariaDB [dbkursus]> select * from mahasiswa;
```

noid	nama	email	alamat	kota	tempatlhr	tgllhr	jnskursus	biaya
0	Ilham Ferdiansyah	ferdex@gmail.com	Cibogo	Bandung	Cianjur	2000-09-01	Aplikasi Perkantoran	500000
1	Raihan	mrailhanna@gmail.com	Intan	Garut	Garut	2001-08-27	Aplikasi Perkantoran	500000
2	Aldo	aldodwrz@gmail.com	depan Kampus	Bandung	Bogor	2001-03-03	Multimedia	1500000
3	Han	hahaha@gmail.com	Kampus	Bandung	cirebon	2001-01-01	Multimedia	1500000
4	hantu	bbaay@gmail.com	Kampus	Garut	lawak	2001-03-23	Multimedia	1500000
5	Azmii	nyiba@gmail.com	Kuburan	Guys	hiii	2001-01-01	Multimedia	1500000
6	Nur	kenapa@gmail.com	Cijerokaso	Hi	Guys	2001-01-01	Multimedia	1500000
7	heheh	kenap2@gmail.com	Cijerokaso	Garut	Jambi	2000-01-01	Aplikasi Perkantoran	500000
8	Raihan Tamvan	tamvan@gmail.com	Cijerokaso	Garut	dunya	2000-12-01	Aplikasi Perkantoran	500000
9	Iki	kabur@gmail.com	Sarijadi	bogot	Binjai	2001-01-20	Aplikasi Perkantoran	500000

10 rows in set (0.001 sec)

4. Tampilkan Data Tutor beserta Jenis kursus yang diampu

```
MariaDB [dbkursus]> select * from mahasiswa;
```

noid	nama	email	alamat	kota	tempatlhr	tgllhr	jnskursus	biaya	Nama_tutor
0	Ilham Ferdiansyah	ferdex@gmail.com	Cibogo	Bandung	Cianjur	2000-09-01	Aplikasi Perkantoran	500000	Asep
1	Raihan	mrailhanna@gmail.com	Intan	Garut	Garut	2001-08-27	Aplikasi Perkantoran	500000	Asep
2	Aldo	aldodwrz@gmail.com	depan Kampus	Bandung	Bogor	2001-03-03	Multimedia	1500000	Didik
3	Han	hahaha@gmail.com	Kampus	Bandung	cirebon	2001-01-01	Multimedia	1500000	Didik
4	hantu	bbaay@gmail.com	Kampus	Garut	lawak	2001-03-23	Multimedia	1500000	Didik
5	Azmii	nyiba@gmail.com	Kuburan	Guys	hiii	2001-01-01	Multimedia	1500000	Didik
6	Nur	kenapa@gmail.com	Cijerokaso	Hi	Guys	2001-01-01	Multimedia	1500000	Didik
7	heheh	kenap2@gmail.com	Cijerokaso	Garut	Jambi	2000-01-01	Aplikasi Perkantoran	500000	Asep
8	Raihan Tamvan	tamvan@gmail.com	Cijerokaso	Garut	dunya	2000-12-01	Aplikasi Perkantoran	500000	Asep
9	Iki	kabur@gmail.com	Sarijadi	bogot	Binjai	2001-01-20	Aplikasi Perkantoran	500000	Asep

10 rows in set (0.000 sec)

5. Tampilkan jenis kursus apa saja yang ditawarkan pada hari Senin

```
MariaDB [dbkursus]> select * from mahasiswa;
```

jnskursus
Multimedia
Multimedia
Multimedia
Multimedia
Multimedia

5 rows in set (0.056 sec)

6. Tampilkan total pendapatan yang diterima untuk jenis kursus Aplikasi Perkantoran selama bulan April 2009. (empty set dikarenakan ketika penginputan tidak ada kapan mulainya hingga akhirnya juga

```
MariaDB [dbkursus]> select * from mahasiswa;
```

Empty set (0.001 sec)