

1. CREATE DATABASE PERPUSTAKAAN

```
MariaDB [perpustakaan]> create database perpustakaan;
```

2. BUAT TABEL PENGARANG, PENERBIT DAN TABEL KOLEKSI BUKU
(Integrity References ke tabel pengarang dan tabel penerbit)

```
MariaDB [perpustakaan]> desc pengarang  
-> ;
```

Field	Type	Null	Key	Default	Extra
idpengarang	varchar(6)	NO	PRI	NULL	
pengarang	varchar(20)	NO		NULL	
alamat	varchar(40)	YES		NULL	
email	varchar(40)	YES		NULL	

4 rows in set (0.001 sec)

```
MariaDB [perpustakaan]> desc penerbit;
```

Field	Type	Null	Key	Default	Extra
idpenerbit	varchar(6)	NO	PRI	NULL	
penerbit	varchar(20)	NO		NULL	
alamat	varchar(40)	YES		NULL	
kontak	varchar(30)	YES		NULL	
email	varchar(40)	YES		NULL	

5 rows in set (0.002 sec)

```
MariaDB [perpustakaan]> desc koleksibuku;
```

Field	Type	Null	Key	Default	Extra
idbuku	varchar(6)	NO	PRI	NULL	
judul	varchar(6)	NO		NULL	
idpengarang	varchar(6)	YES	MUL	NULL	
idpenerbit	varchar(6)	YES	MUL	NULL	
jumlah	int(2)	YES		NULL	
rak	varchar(20)	YES		NULL	

6 rows in set (0.001 sec)

3. MASUKKAN DATA PADA TABEL PENGARANG, PENERBIT DAN KOLEKSI BUKU MASING-MASING MINIMAL 10 RECORD DATA (SALAH SATU DATA PENGARANG NAMA Anda)

MariaDB [perpustakaan]> select * from penerbit;

idpenerbit	penerbit	alamat	kontak	email
PB01	Gramedia	Jakarta	021-123456	gramedia@email.com
PN001	Gramedia	Jakarta	021-123456	contact@gramedia.com
PN002	Elex Media	Surabaya	031-654321	info@elexmedia.com
PN003	Mizan	Bandung	022-789123	support@mizan.com
PN004	Andi Offset	Yogyakarta	0274-567890	contact@andoffset.com
PN005	Deepublish	Sleman	0274-789456	info@deepublish.com
PN006	Pustaka Pelajar	Semarang	024-123789	pustakapelajar@mail.com
PN007	Media Ilmu	Depok	021-555111	mediailmu@mail.com
PN008	Eureka Books	Bogor	0251-678123	eurekabooks@mail.com
PN009	Phoenix Publisher	Medan	061-222333	contact@phoenixpublisher.com
PN010	Alfabeta	Bandung	022-334455	info@alfabeta.com

MariaDB [perpustakaan]> select * from koleksibuku;

idbuku	judul	idpengarang	idpenerbit	jumlah	rak
B001	Hujan	P001	PB01	5	Rak A1
B002	Pulang	P001	PN001	3	Rak A2
B003	Langit	PG001	PN002	2	Rak A3
B004	Binar	PG002	PN003	4	Rak B1
B005	Senja	PG003	PN004	6	Rak B2
B006	Pelagi	PG004	PN005	3	Rak B3
B007	Cahaya	PG005	PN006	2	Rak C1
B008	Mimpi	PG006	PN007	5	Rak C2
B009	Langka	PG007	PN008	3	Rak C3
B010	Bayang	PG008	PN009	4	Rak D1
B011	Jejak	PG009	PN010	2	Rak D2
B012	Peluk	PG010	PN001	3	Rak D3
B013	Jendel	PG011	PN002	2	Rak E1
B014	Awan	PG012	PN003	1	Rak E2

14 rows in set (0.001 sec)

```

MariaDB [perpustakaan]> select * from pengarang;
+-----+-----+-----+-----+
| idpengarang | pengarang | alamat | email |
+-----+-----+-----+-----+
| P001        | Tere Liye | Jakarta | tere@email.com |
| PG001       | Atha      | Jakarta | mdhyaulatha@gmail.com |
| PG002       | Nadya     | Bandung | nadya@mail.com |
| PG003       | Riko      | Surabaya | riko@mail.com |
| PG004       | Putri Melati | Yogyakarta | putri@mail.com |
| PG005       | Andi Wijaya | Jakarta | andi@mail.com |
| PG006       | Siti Nurhaliza | Malang | siti@mail.com |
| PG007       | Budi Santoso | Semarang | budi@mail.com |
| PG008       | Dina Aprilia | Depok | dina@mail.com |
| PG009       | Rina Mulyani | Makassar | rina@mail.com |
| PG010       | Zaki Ramadhan | Padang | zaki@mail.com |
| PG011       | Lina Hartati | Bekasi | lina@mail.com |
| PG012       | Yusuf Akbar | Solo | yusuf@mail.com |
+-----+-----+-----+-----+

```

4. TAMPILKAN SEMUA PENGARANG DAN ALAMATNYA

```

MariaDB [perpustakaan]> SELECT
->   pengarang AS nama_pengarang,
->   alamat
-> FROM pengarang;
+-----+-----+
| nama_pengarang | alamat |
+-----+-----+
| Tere Liye      | Jakarta |
| Atha           | Jakarta |
| Nadya          | Bandung |
| Riko           | Surabaya |
| Putri Melati   | Yogyakarta |
| Andi Wijaya    | Jakarta |
| Siti Nurhaliza | Malang |
| Budi Santoso   | Semarang |
| Dina Aprilia   | Depok |
| Rina Mulyani   | Makassar |
| Zaki Ramadhan  | Padang |
| Lina Hartati   | Bekasi |
| Yusuf Akbar    | Solo |
+-----+-----+
13 rows in set (0.000 sec)

```

5. TAMPILKAN SEMUA PENERBIT DAN ALAMATNYA

6. TAMPILKAN JUDUL BUKU, NAMA PENGARANG DAN NAMA PENERBITNYA !

```
MariaDB [perpustakaan]> SELECT
-> k.judul AS judul_buku,
-> p.pengarang AS nama_pengarang,
-> pb.penerbit AS nama_penerbit
-> FROM koleksibuku k
-> JOIN pengarang p ON k.idpengarang = p.idpengarang
-> JOIN penerbit pb ON k.idpenerbit = pb.idpenerbit;
```

judul_buku	nama_pengarang	nama_penerbit
Hujan	Tere Liye	Gramedia
Pulang	Tere Liye	Gramedia
Langit	Atha	Elex Media
Binar	Nadya	Mizan
Senja	Riko	Andi Offset
Pelagi	Putri Melati	Deepublish
Cahaya	Andi Wijaya	Pustaka Pelajar
Mimpi	Siti Nurhaliza	Media Ilmu
Langka	Budi Santoso	Eureka Books
Bayang	Dina Aprilia	Phoenix Publisher
Jejak	Rina Mulyani	Alfabeta
Peluk	Zaki Ramadhan	Gramedia
Jendel	Lina Hartati	Elex Media
Awan	Yusuf Akbar	Mizan

14 rows in set (0.001 sec)

7. TAMPILKAN BEBERAPA JUMLAH SEMUA BUKU

```
MariaDB [perpustakaan]> SELECT
->   pb.penerbit AS nama_penerbit,
->   SUM(k.jumlah) AS total_buku
-> FROM
->   koleksibuku k
-> JOIN
->   penerbit pb ON k.idpenerbit = pb.idpenerbit
-> GROUP BY
->   pb.penerbit;
```

nama_penerbit	total_buku
Alfabeta	2
Andi Offset	6
Deepublish	3
Elex Media	4
Eureka Books	3
Gramedia	11
Media Ilmu	5
Mizan	5
Phoenix Publisher	4
Pustaka Pelajar	2

10 rows in set (0.001 sec)

8. TAMPILKAN BERAPA JUMLAH BUKU BERDASARKAN PENGARANG

```
MariaDB [perpustakaan]> SELECT
->   penerbit.penerbit AS nama_penerbit,
->   SUM(koleksibuku.jumlah) AS jumlah_buku
-> FROM
->   koleksibuku
-> JOIN
->   penerbit ON koleksibuku.idpenerbit = penerbit.idpenerbit
-> GROUP BY
->   penerbit.idpenerbit, penerbit.penerbit;
```

nama_penerbit	jumlah_buku
Gramedia	5
Gramedia	6
Elex Media	4
Mizan	5
Andi Offset	6
Deepublish	3
Pustaka Pelajar	2
Media Ilmu	5
Eureka Books	3
Phoenix Publisher	4
Alfabeta	2

11 rows in set (0.001 sec)

9. TAMPILKAN BERAPA JUMLAH SEMUA BUKU

```
MariaDB [perpustakaan]> SELECT
->   SUM(jumlah) AS total_buku
-> FROM
->   koleksibuku;
```

total_buku
45

1 row in set (0.000 sec)

10. TAMPILKAN BERAPA JUMLAH SEMUA PENGARANG

```
MariaDB [perpustakaan]> SELECT
->     COUNT(*) AS jumlah_pengarang
-> FROM
->     pengarang;

+-----+
| jumlah_pengarang |
+-----+
|                13 |
+-----+

1 row in set (0.001 sec)
```

11. Tampilkan Jumlah Pengarang Buku yang beralamat "Jakarta"!

```
MariaDB [perpustakaan]> SELECT  
-> COUNT(*) AS jumlah_pengarang_jakarta  
-> FROM  
-> pengarang  
-> WHERE  
-> alamat = 'Jakarta';  
  
+-----+  
| jumlah_pengarang_jakarta |  
+-----+  
|                          3 |  
+-----+  
  
1 row in set (0.000 sec)
```

12. Tampilkan nama penerbit, alamat, email, nama pengarang dan email pengarang!

```
MariaDB [perpustakaan]> SELECT
-> penerbit.penerbit AS nama_penerbit,
-> penerbit.alamat AS alamat_penerbit,
-> penerbit.email AS email_penerbit,
-> pengarang.pengarang AS nama_pengarang,
-> pengarang.email AS email_pengarang
-> FROM
-> koleksibuku
-> JOIN
-> penerbit ON koleksibuku.idpenerbit = penerbit.idpenerbit
-> JOIN
-> pengarang ON koleksibuku.idpengarang = pengarang.idpengarang;
```

nama_penerbit	alamat_penerbit	email_penerbit	nama_pengarang	email_pengarang
Gramedia	Jakarta	gramedia@email.com	Tere Liye	tere@email.com
Gramedia	Jakarta	contact@gramedia.com	Tere Liye	tere@email.com
Elex Media	Surabaya	info@elexmedia.com	Atha	mdhyaulatha@gmail.com
Mizan	Bandung	support@mizan.com	Nadya	nadya@mail.com
Andi Offset	Yogyakarta	contact@andoffset.com	Riko	riko@mail.com
Deepublish	Sleman	info@deepublish.com	Putri Melati	putri@mail.com
Pustaka Pelajar	Semarang	pustakapelajar@mail.com	Andi Wijaya	andi@mail.com
Media Ilmu	Depok	mediailmu@mail.com	Siti Nurhaliza	siti@mail.com
Eureka Books	Bogor	eurekabooks@mail.com	Budi Santoso	budi@mail.com
Phoenix Publisher	Medan	contact@phoenixpublisher.com	Dina Aprilia	dina@mail.com
Alfabeta	Bandung	info@alfabeta.com	Rina Mulyani	rina@mail.com
Gramedia	Jakarta	contact@gramedia.com	Zaki Ramadhan	zaki@mail.com
Elex Media	Surabaya	info@elexmedia.com	Lina Hartati	lina@mail.com
Mizan	Bandung	support@mizan.com	Yusuf Akbar	yusuf@mail.com

14 rows in set (0.001 sec)

13. TAMPILKAN JUMLAH PENGARANG BERDASARKAN PENERBIT

```
MariaDB [perpustakaan]> SELECT
-> p.penerbit AS nama_penerbit,
-> COUNT(DISTINCT k.idpengarang) AS jumlah_pengarang
-> FROM
-> penerbit p
-> JOIN
-> koleksibuku k ON p.idpenerbit = k.idpenerbit
-> GROUP BY
-> p.penerbit;
```

nama_penerbit	jumlah_pengarang
Alfabeta	1
Andi Offset	1
Deepublish	1
Elex Media	2
Eureka Books	1
Gramedia	2
Media Ilmu	1
Mizan	2
Phoenix Publisher	1
Pustaka Pelajar	1

10 rows in set (0.001 sec)