

Tugas-02:

Buatlah ROLE dan HAK AKSES (GRANT)

terkait er-diagram pada tugas-01:

1. Database classicmodels.

```
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| akademik |
| bookstore_db |
| classicmodels |
| informatika |
| information_schema |
| mahasiswa |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
| tugas_db |
+-----+
11 rows in set (0.01 sec)

MariaDB [(none)]> use classicmodels;
Database changed
```

2. Tabel 'customers' dalam database 'clasicmodels'.

```
MariaDB [classicmodels]> create table customer(
-> customerNumber int(11) NOT NULL,
-> customerName varchar(50) NOT NULL,
-> contactLastName varchar(50) NOT NULL,
-> contactFirstName varchar(50) NOT NULL,
-> phone varchar(50) NOT NULL,
-> addressLine1 varchar(50) NOT NULL,
-> addressLine2 varchar(50) DEFAULT NULL,
-> city varchar(50) NOT NULL,
-> state varchar(50) DEFAULT NULL,
```

```
MariaDB [classicmodels]> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| customerNumber | int(11) | NO | | NULL | |
| customerName | varchar(50) | NO | | NULL | |
| contactLastName | varchar(50) | NO | | NULL | |
| contactFirstName | varchar(50) | NO | | NULL | |
| phone | varchar(50) | NO | | NULL | |
| addressLine1 | varchar(50) | NO | | NULL | |
| addressLine2 | varchar(50) | YES | | NULL | |
| city | varchar(50) | NO | | NULL | |
| state | varchar(50) | YES | | NULL | |
| postalCode | varchar(15) | YES | | NULL | |
| country | varchar(50) | NO | | NULL | |
| salesRepEmployeeNumber | int(11) | YES | | NULL | |
| creditLimit | decimal(10,2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
13 rows in set (0.06 sec)
```

3. Tabel 'employees' dalam database 'clasicmodels'.

```
13 rows in set (0.06 sec)

MariaDB [classicmodels]> CREATE TABLE employees (
-> employeeNumber int(11) NOT NULL,
-> lastName varchar(50) NOT NULL,
-> firstName varchar(50) NOT NULL,
-> extension varchar(10) NOT NULL,
-> email varchar(100) NOT NULL,
-> officeCode varchar(10) NOT NULL,
-> reportsTo int(11) DEFAULT NULL,
-> jobTitle varchar(50) NOT NULL
-> );
Query OK, 0 rows affected (0.17 sec)

MariaDB [classicmodels]> desc employees;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| employeeNumber | int(11) | NO | | NULL | |
| lastName | varchar(50) | NO | | NULL | |
| firstName | varchar(50) | NO | | NULL | |
| extension | varchar(10) | NO | | NULL | |
| email | varchar(100) | NO | | NULL | |
| officeCode | varchar(10) | NO | | NULL | |
| reportsTo | int(11) | YES | | NULL | |
| jobTitle | varchar(50) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)
```

4. Tabel 'offices' dalam database 'classicmodels'.

```
MariaDB [classicmodels]> CREATE TABLE offices (
-> officeCode varchar(10) NOT NULL,
-> city varchar(50) NOT NULL,
-> phone varchar(50) NOT NULL,
-> addressLine1 varchar(50) NOT NULL,
-> addressLine2 varchar(50) DEFAULT NULL,
-> state varchar(50) DEFAULT NULL,
-> country varchar(50) NOT NULL,
-> postalCode varchar(15) NOT NULL,
-> territory varchar(10) NOT NULL );
Query OK, 0 rows affected (0.33 sec)
```

5. Tabel 'orderdetails' dalam database 'classicmodels'.

```
MariaDB [classicmodels]> CREATE TABLE orderdetails (
-> orderNumber int(11) NOT NULL,
-> productCode varchar(15) NOT NULL,
-> quantityOrdered int(11) NOT NULL,
-> priceEach decimal(10,2) NOT NULL,
-> orderLineNumber smallint(6) NOT NULL );
Query OK, 0 rows affected (0.22 sec)
```

```
MariaDB [classicmodels]> desc orderdetails;
```

Field	Type	Null	Key	Default	Extra
orderNumber	int(11)	NO		NULL	
productCode	varchar(15)	NO		NULL	
quantityOrdered	int(11)	NO		NULL	
priceEach	decimal(10,2)	NO		NULL	
orderLineNumber	smallint(6)	NO		NULL	

6. Tabel 'orders' dalam database 'classicmodels'.

```
MariaDB [classicmodels]> CREATE TABLE orders (
-> orderNumber int(11) NOT NULL,
-> orderDate date NOT NULL,
-> requiredDate date NOT NULL,
-> shippedDate date DEFAULT NULL,
-> status varchar(15) NOT NULL,
-> comments text,
-> customerNumber int(11) NOT NULL );
Query OK, 0 rows affected (0.24 sec)
```

```
MariaDB [classicmodels]> desc orders;
```

Field	Type	Null	Key	Default	Extra
orderNumber	int(11)	NO		NULL	
orderDate	date	NO		NULL	
requiredDate	date	NO		NULL	
shippedDate	date	YES		NULL	
status	varchar(15)	NO		NULL	
comments	text	YES		NULL	
customerNumber	int(11)	NO		NULL	

```
7 rows in set (0.07 sec)
```

7. Tabel 'payments' dalam database 'classicmodels'.

```
MariaDB [classicmodels]> CREATE TABLE payments (
-> customerNumber int(11) NOT NULL,
-> checkNumber varchar(50) NOT NULL,
-> paymentDate date NOT NULL,
-> amount decimal(10,2) NOT NULL );
Query OK, 0 rows affected (0.20 sec)
```

```
MariaDB [classicmodels]> desc payments;
```

Field	Type	Null	Key	Default	Extra
customerNumber	int(11)	NO		NULL	
checkNumber	varchar(50)	NO		NULL	
paymentDate	date	NO		NULL	
amount	decimal(10,2)	NO		NULL	

8. Tabel 'productlines' dalam database 'classicmodels'.

```
MariaDB [classicmodels]> CREATE TABLE productlines (
-> productLine varchar(50) NOT NULL,
-> textDescription varchar(4000) DEFAULT NULL,
-> htmlDescription mediumtext,
-> image mediumblob );
Query OK, 0 rows affected (0.14 sec)
```

```
MariaDB [classicmodels]> desc productlines;
```

Field	Type	Null	Key	Default	Extra
productLine	varchar(50)	NO		NULL	
textDescription	varchar(4000)	YES		NULL	
htmlDescription	mediumtext	YES		NULL	
image	mediumblob	YES		NULL	

```
4 rows in set (0.06 sec)
```

9. Table 'products' dalam database 'classicmodels'.

```
MariaDB [classicmodels] > CREATE TABLE products (
  -> productCode varchar(15) NOT NULL,
  -> productName varchar(70) NOT NULL,
  -> productLine varchar(50) NOT NULL,
  -> productScale varchar(10) NOT NULL,
  -> productVendor varchar(50) NOT NULL,
  -> productDescription text NOT NULL,
  -> quantityInStock smallint(6) NOT NULL,
  -> buyPrice decimal(10,2) NOT NULL,
  -> MSRP decimal(10,2) NOT NULL);
Query OK, 0 rows affected (0.18 sec)

MariaDB [classicmodels] > desc products;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| productCode | varchar(15) | NO | | NULL | |
| productName | varchar(70) | NO | | NULL | |
| productLine | varchar(50) | NO | | NULL | |
| productScale | varchar(10) | NO | | NULL | |
| productVendor | varchar(50) | NO | | NULL | |
| productDescription | text | NO | | NULL | |
| quantityInStock | smallint(6) | NO | | NULL | |
| buyPrice | decimal(10,2) | NO | | NULL | |
| MSRP | decimal(10,2) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
9 rows in set (0.01 sec)
```

10. Menambahkan data kedalam table 'customers'.

```
-> (486,'Motor Mint Distributors Inc.','Salazar','Rosa','2155559857','11328
Douglas Av.','NULL','Philadelphia','PA','71270','USA',1323,'72600.00'),
-> (487,'Signal Collectibles Ltd.','Taylor','Sue','4155554312','2793 Furth C
ircle','NULL','Brisbane','CA','94217','USA',1165,'60300.00'),
-> (489,'Double Decker Gift Stores, Ltd.','Smith','Thomas','(171) 555-7555',
'120 Hanover Sq.','NULL','London','NULL','WA1 1DP','UK',1501,'43300.00'),
-> (495,'Diecast Collectables','Franco','Valarie','6175552555','6251 Ingle I
n.','NULL','Boston','MA','51003','USA',1188,'85100.00'),
-> (496,'Kelly's Gift Shop','Snowden','Tony','+64 9 5555500','Arenales 1938
3\A\','NULL','Auckland','NULL','New Zealand',1612,'110000.00');
Query OK, 122 rows affected (0.12 sec)
Records: 122 Duplicates: 0 Warnings: 0

MariaDB [classicmodels] >
```

11. Menambahkan data kedalam table 'employees'.

```
-> (1611,'Fixter','Andy','x101','afixter@classicmodelcars.com','6',1088,'Sa
es Rep'),
-> (1612,'Marsh','Peter','x102','pmarsh@classicmodelcars.com','6',1088,'Sa
s Rep'),
-> (1619,'King','Tom','x103','tking@classicmodelcars.com','6',1088,'Sales R
p'),
-> (1621,'Nishi','Mami','x101','mnishi@classicmodelcars.com','5',1056,'Sale
Rep'),
-> (1625,'Kato','Yoshimi','x102','ykato@classicmodelcars.com','5',1621,'Sa
s Rep'),
-> (1702,'Gerard','Martin','x2312','mgerard@classicmodelcars.com','4',1102,
Sales Rep');
Query OK, 23 rows affected (0.10 sec)
Records: 23 Duplicates: 0 Warnings: 0

MariaDB [classicmodels] >
```

12. Menambahkan data kedalam table 'offices'.

```
MariaDB [classicmodels] > insert into offices (officeCode,city,phone,addressLine1
,addressLine2,state,country,postalCode,territory) values
-> ('1','San Francisco','+1 650 219 4782','100 Market Street','Suite 300','C
A','USA','94080','NA'),
-> ('2','Boston','+1 215 837 0825','1550 Court Place','Suite 102','MA','USA',
'02107','NA'),
-> ('3','NYC','+1 212 555 3000','523 East 53rd Street','apt. 5A','NY','USA',
'10022','NA'),
-> ('4','Paris','+33 14 723 4404','43 Rue Jouffroy D'abbans','NULL','Fra
nce','75017','EMEA'),
-> ('5','Tokyo','+81 33 224 5000','4-1 Kioicho','NULL','Chiyoda-Ku','Japan',
'102-8578','Japan'),
-> ('6','Sydney','+61 2 9264 2451','5-11 Wentworth Avenue','Floor #2','NULL',
Australia','NSW 2010','APAC'),
-> ('7','London','+44 20 7877 2041','25 Old Broad Street','Level 7','NULL','UK',
'EC2N 1HN','EMEA');
Query OK, 7 rows affected (0.08 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

13. Menambahkan data kedalam table 'orderdetails'.

```

-> <10425,'S18_2238',28,'147.36',3>,
-> <10425,'S18_2319',38,'117.82',7>,
-> <10425,'S18_2432',19,'48.62',10>,
-> <10425,'S18_3232',28,'140.55',8>,
-> <10425,'S18_4600',38,'107.76',13>,
-> <10425,'S24_1444',55,'53.75',1>,
-> <10425,'S24_2300',49,'127.79',9>,
-> <10425,'S24_2840',31,'31.82',5>,
-> <10425,'S32_1268',41,'83.79',11>,
-> <10425,'S32_2509',11,'50.32',6>,
-> <10425,'S50_1392',18,'94.92',2>;
Query OK, 2996 rows affected (0.23 sec)
Records: 2996 Duplicates: 0 Warnings: 0
MariaDB [classicmodels]>

```

10423	S18_3130	21	70.77	2
10423	S18_3320	21	80.36	5
10423	S24_4258	28	78.89	4
10424	S10_1949	50	201.44	6
10424	S12_1666	49	121.64	3
10424	S18_1097	54	108.50	5
10424	S18_4668	26	40.25	4
10424	S32_3522	44	54.94	2
10424	S700_2824	46	85.98	1
10425	S10_4962	38	131.49	12
10425	S12_4473	33	95.99	3
10425	S18_2238	28	147.36	3
10425	S18_2319	38	117.82	7
10425	S18_2432	19	48.62	10
10425	S18_3232	28	140.55	8
10425	S18_4600	38	107.76	13
10425	S24_1444	55	53.75	1
10425	S24_2300	49	127.79	9
10425	S24_2840	31	31.82	5
10425	S32_1268	41	83.79	11
10425	S32_2509	11	50.32	6
10425	S50_1392	18	94.92	2

2996 rows in set (0.01 sec)

MariaDB [classicmodels]>

14. Menambahkan data kedalam table 'orders'.

```

the scales of the models don't match what was discussed. I keep all the papers
ork though to prove otherwise',471),
-> <10416,'2005-05-10','2005-05-16','2005-05-14','Shipped',NULL,386>,
-> <10417,'2005-05-13','2005-05-19','2005-05-19','Disputed','Customer doesn
't like the colors and precision of the models.',141>,
-> <10418,'2005-05-16','2005-05-24','2005-05-20','Shipped',NULL,412>,
-> <10419,'2005-05-17','2005-05-28','2005-05-19','Shipped',NULL,382>,
-> <10420,'2005-05-29','2005-06-07',NULL,'In Process',NULL,282>,
-> <10421,'2005-05-29','2005-06-06',NULL,'In Process','Custom shipping instr
uctions were sent to warehouse',124>,
-> <10422,'2005-05-30','2005-06-11',NULL,'In Process',NULL,157>,
-> <10423,'2005-05-30','2005-06-05',NULL,'In Process',NULL,314>,
-> <10424,'2005-05-31','2005-06-08',NULL,'In Process',NULL,141>,
-> <10425,'2005-05-31','2005-06-07',NULL,'In Process',NULL,119>;
Query OK, 326 rows affected (0.16 sec)
Records: 326 Duplicates: 0 Warnings: 0
MariaDB [classicmodels]>

```

```

+-----+-----+-----+-----+-----+-----+
| 10417 | 2005-05-13 | 2005-05-19 | 2005-05-19 | Disputed | Customer |
| doesn't like the colors and precision of the models. |
+-----+-----+-----+-----+-----+-----+
| 10418 | 2005-05-16 | 2005-05-24 | 2005-05-20 | Shipped | NULL |
+-----+-----+-----+-----+-----+-----+
| 10419 | 2005-05-17 | 2005-05-28 | 2005-05-19 | Shipped | NULL |
+-----+-----+-----+-----+-----+-----+
| 10420 | 2005-05-29 | 2005-06-07 | NULL | In Process | NULL |
+-----+-----+-----+-----+-----+-----+
| 10421 | 2005-05-29 | 2005-06-06 | NULL | In Process | Custom sh |
| ipping instructions were sent to warehouse |
+-----+-----+-----+-----+-----+-----+
| 10422 | 2005-05-30 | 2005-06-11 | NULL | In Process | NULL |
+-----+-----+-----+-----+-----+-----+
| 10423 | 2005-05-30 | 2005-06-05 | NULL | In Process | NULL |
+-----+-----+-----+-----+-----+-----+
| 10424 | 2005-05-31 | 2005-06-08 | NULL | In Process | NULL |
+-----+-----+-----+-----+-----+-----+
| 10425 | 2005-05-31 | 2005-06-07 | NULL | In Process | NULL |
+-----+-----+-----+-----+-----+-----+
| 119 |
+-----+-----+-----+-----+-----+-----+
326 rows in set (0.00 sec)
MariaDB [classicmodels]>

```

15. Menambahkan data kedalam table 'payments'.

```

-> <484,'GK294076','2004-10-26','3474.66')>,
-> <484,'JH546765','2003-11-29','47513.19')>,
-> <486,'BL66528','2004-04-14','5899.38')>,
-> <486,'HS86661','2004-11-23','45994.07')>,
-> <486,'JB117768','2003-03-20','25833.14')>,
-> <487,'AH612904','2003-09-28','29997.09')>,
-> <487,'PT550181','2004-02-29','12573.28')>,
-> <489,'OC773849','2003-12-04','22275.73')>,
-> <489,'PO860906','2004-01-31','7310.42')>,
-> <495,'BH167026','2003-12-26','59265.14')>,
-> <495,'FN155234','2004-05-14','6276.60')>,
-> <496,'EU531600','2005-05-25','30253.75')>,
-> <496,'MB342426','2003-07-16','32077.44')>,
-> <496,'MN89921','2004-12-31','52166.00')>;
Query OK, 273 rows affected (0.14 sec)
Records: 273 Duplicates: 0 Warnings: 0
MariaDB [classicmodels]>

```

455	GH715659	2004-11-13	27550.51
456	MO743231	2004-04-30	1679.92
458	DD995006	2004-11-15	33145.56
458	NO377824	2004-02-06	22162.61
458	OO606861	2003-06-13	57131.92
462	ED203900	2005-04-15	30293.77
462	GC60330	2003-11-08	9977.85
462	PE176846	2004-11-27	48355.87
471	AB661578	2004-07-28	9415.13
471	CO645196	2003-12-10	35505.63
473	LI427009	2004-02-17	7612.06
473	PG688499	2003-10-27	17746.26
475	JP113227	2003-12-09	7678.25
475	PB951268	2004-02-13	36070.47
484	GK294076	2004-10-26	3474.66
484	JH546765	2003-11-29	47513.19
486	BL66528	2004-04-14	5899.38
486	HS86661	2004-11-23	45994.07
486	JB117768	2003-03-20	25833.14
487	AH612904	2003-09-28	29997.09
487	PT550181	2004-02-29	12573.28
489	OC773849	2003-12-04	22275.73
489	PO860906	2004-01-31	7310.42
495	BH167026	2003-12-26	59265.14
495	FN155234	2004-05-14	6276.60
496	EU531600	2005-05-25	30253.75
496	MB342426	2003-07-16	32077.44
496	MN89921	2004-12-31	52166.00

```

273 rows in set (0.00 sec)
MariaDB [classicmodels]>

```

16. Menambahkan data kedalam table 'productlines'.

```

-> ('Trains','Model trains are a rewarding hobby for enthusiasts of all age
. Whether you\'re looking for collectible wooden trains, electric streetcars or
locomotives, you\'ll find a number of great choices for any budget within this
category. The interactive aspect of trains makes toy trains perfect for young ch
ildren. The wooden train sets are ideal for children under the age of 5.',NULL,N
LL),
->
-> ('Trucks and Buses','The Truck and Bus models are realistic replicas of
buses and specialized trucks produced from the early 1920s to present. The model
range in size from 1:12 to 1:50 scale and include numerous limited edition and
several out-of-production vehicles. Materials used include tin, diecast and pla
stic. All models include a certificate of authenticity from their manufacturers
and are a perfect ornament for the home and office.',NULL,NULL),
->
-> ('Vintage Cars','Our Vintage Car models realistically portray automobile
produced from the early 1900s through the 1940s. Materials used include Bakeli
e, diecast, plastic and wood. Most of the replicas are in the 1:18 and 1:24 sca
le sizes, which provide the optimum in detail and accuracy. Prices range from $3
.00 up to $180.00 for some special limited edition replicas. All models include
a certificate of authenticity from their manufacturers and come fully assembled
and ready for display in the home or office.',NULL,NULL);
Query OK, 7 rows affected (0.12 sec)
Records: 7 Duplicates: 0 Warnings: 0

MariaDB [classicmodels]>

+-----+-----+-----+-----+
| Trucks and Buses | The Truck and Bus models are realistic replicas of buses and |
| specialized trucks produced from the early 1920s to present. The models range |
| in size from 1:12 to 1:50 scale and include numerous limited edition and severa |
| out-of-production vehicles. Materials used include tin, diecast and plastic. Al |
| l models include a certificate of authenticity from their manufacturers and are |
| a perfect ornament for the home and office. |
+-----+-----+-----+-----+

+-----+-----+-----+-----+
| Vintage Cars | Our Vintage Car models realistically portray automobiles pr |
| oduced from the early 1900s through the 1940s. Materials used include Bakelite, |
| diecast, plastic and wood. Most of the replicas are in the 1:18 and 1:24 scale s |
| izes, which provide the optimum in detail and accuracy. Prices range from $30.00 |
| up to $180.00 for some special limited edition replicas. All models include a c |
| ertificate of authenticity from their manufacturers and come fully assembled and |
| ready for display in the home or office. |
+-----+-----+-----+-----+

+-----+-----+-----+-----+
| NULL | NULL |
+-----+-----+-----+-----+

7 rows in set (0.00 sec)

MariaDB [classicmodels]>

```

17. Menambahkan data kedalam table 'product'.

```

-> ('S700_3962','The Queen Mary','Ships','1:700','Welly Diecast Productions',
'Exact replica. Wood and Metal. Many extras including rigging, long boats, pilo
t house, anchors, etc. Comes with three masts, all square-rigged.',5088,'53.63',
'99.31'),
->
-> ('S700_4002','American Airlines: MD-11S','Planes','1:700','Second Gear Di
ecast','Polished finish. Exact replia with official logos and insignias and retr
actable wheels',8820,'36.27','74.03'),
->
-> ('S72_1253','Boeing X-32A JSF','Planes','1:72','Motor City Art Classics',
'10" Wingspan with retractable landing gears.Comes with pilot',4857,'32.77','49
.66'),
->
-> ('S72_3212','Pont Yacht','Ships','1:72','Unimax Art Galleries','Measures
38 inches Long x 33 3/4 inches High. Includes a stand.\n\nMany extras including
rigging, long boats, pilot house, anchors, etc. Comes with 2 masts, all square-r
igged',414,'33.30','54.60');
Query OK, 110 rows affected (0.26 sec)
Records: 110 Duplicates: 0 Warnings: 0

MariaDB [classicmodels]>

+-----+-----+-----+-----+
| 53.63 | 99.31 | |
| S700_4002 | American Airlines: MD-11S | Planes |
| 1:700 | Second Gear Diecast | Polished finish. Exact replia with o |
| fficial logos and insignias and retractable wheels |
+-----+-----+-----+-----+

+-----+-----+-----+-----+
| 36.27 | 74.03 | |
| S72_1253 | Boeing X-32A JSF | Planes |
| 1:72 | Motor City Art Classics | 10" Wingspan with retractable landin |
| g gears.Comes with pilot |
+-----+-----+-----+-----+

+-----+-----+-----+-----+
| 32.77 | 49.66 | |
| S72_3212 | Pont Yacht | Ships |
| 1:72 | Unimax Art Galleries | Measures 38 inches Long x 33 3/4 inc |
| hes High. Includes a stand. |
| Many extras including rigging, long boats, pilot house, anchors, etc. Comes with |
| 2 masts, all square-rigged |
+-----+-----+-----+-----+

+-----+-----+-----+-----+
| 414 | 33.30 | 54.60 |
+-----+-----+-----+-----+

110 rows in set (0.00 sec)

MariaDB [classicmodels]>

```

18. Membuat role pada table payment, customers, office.

```
-----+-----+
326 rows in set (0.06 sec)

MariaDB [classicmodels]> create ROLE classicmodels_employees,classicmodels_customers,classicmodels_offices;
Query OK, 0 rows affected (0.07 sec)
```

19. Memberikan hak akses pada role.

```
MariaDB [classicmodels]> Grant all on classicmodels.* TO classicmodels_employees;
ERROR 1133 (28000): Can't find any matching row in the user table
MariaDB [classicmodels]> Grant all on classicmodels.* TO classicmodels_customers;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> Grant select on classicmodels.* TO classicmodels_offices;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> GRANT insert,update,delete on classicmodels.* TO classicmodels_employees;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> _
```

20. Membuat user account.

```
MariaDB [classicmodels]> create user classicmodels_offices@localhost identified by 'secure$1782';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> create user classicmodels_customers@localhost identified by 'secure$5432';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> create user classicmodels_employees@localhost identified by 'secure$9075';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> _
```

21. Memberikan hak akses role kepada user.

```
MariaDB [classicmodels]> grant classicmodels_offices to classicmodels_offices@localhost;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> grant classicmodels_customers to classicmodels_customers@localhost;
ERROR 1959 (OP000): Invalid role specification 'classicmodels_customers'.
```

```
MariaDB [classicmodels]> grant classicmodels_customers to classicmodels_customers@localhost;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> grant classicmodels_employees to classicmodels_employees@localhost;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]>
```

KETERANGAN:

- A. Pertama kita masuk ke mysql dengan :
- Buka command prompt.
 - Nyalakan xampp : apache dan mysql
 - Masuk ke mysql : `mysql -u root -p`
- B. Membuat dan masuk ke database:
- Perintah: `create database classicmodels;`
 - Perintah : `use classicmodels;`
- C. Setelah itu membuat tabel:
- Perintah : `create table customers();`
- D. Menambahkan data kedalam tabel dengan perintah INSERT.
- E. Pastikan data dalam table dengan perintah SELECT.
- F. Setelah itu kita mulai membuat ROLE.
- G. Disini saya membuat 3 ROLE:
- Saya memberikan hak akses penuh pada ROLE `classicmodels_offices`.

`GRANT ALL ON classicmodels.* TO classicmodels.offices;`
 - Saya memberikan hak akses untuk SELECT atau membaca pada ROLE `classicmodels.customers`.

`GRANT SELECT ON classicmodels.* TO classicmodels.customers;`
 - Saya memberikan hak akses INSERT, UPDATE, DELETE kepada ROLE `classicmodels.employees`.

`GRANT INSERT, UPDATE, DELETE ON classicmodels.* TO classicmodels.employees.`
- H. Membuat user account.
- Perintah : `create user classicmodels.offices@localhost identified by 'secreate';`

(Berikan juga kepada customer dan employees.)
- I. Memberikan hak akses ROLE kepada setiap USER.
- `GRANT classicmodels.offices TO classicmodels.offices@localhost;`

(Berikan kepada customer dan employees.)