## **LAPORAN**

## PRAKTEK BASIS DATA

## **INNER JOIN**



## **DISUSUN OLEH:**

**SULIS TIYAH** 

2001081002

**TEKNIK KOMPUTER - 2B** 

**SEMESTER 3** 

JURUSAN TEKNOLOGI INFORMASI
PROGRAM STUDI TEKNIK KOMPUTER
POLITEKNIK NEGERI PADANG

2021

### A. DASAR TEORI

Fungsi IFNULL() digunakan untuk mengembalikan sebuah nilai tertentu pada suatu kolom yang bernilai Null.

Struktur:

▲ IFNULL(statements1, statements2)

Fungsi NULLIF() mengembalikan NULL jika dua ekspresi sama, jika tidak maka akan mengembalikan ekspresi pertama. untuk fungsi NULLIF yang diuji adalah kedua statement. Jika statement1 nilainya sama dengan statement2, maka akan ditampilkan nilai NULL. Jika terdapat perbedaan antara kedua statement, maka akan dikembalikan nilai statement1

Struktur:

**♦** NULLIF(statement1, statement2)

**INNER JOIN** 

Inner join merupakan jenis join yang paling umum yang dapat digunakan pada semua database. Jenis ini dapat digunakan bila ingin merelasikan dua set data yang ada di tabel, letak relasinya setelah pada perintah ON pada join. Inner join mengembalikan barisbaris dari dua tabel atau lebih yang memenuhi syarat.

Struktur

▲ SELECT field1,field2, fieldn FROM tabel1 INNER JOIN tabel2 ON tabel1.key = tabel2.key

Struktur 1:

SELECT tabel1.filed1,tabel2.field2,......

FROM tabel1.tabel2

WHERE tabel1.fieldRealasi=tabel2.fieldRelasi;

Struktur 2:

SELECT field1, field2

FROM tabel1 INNER JOIN tabel2

### **B. ALAT DAN BAHAN**

- 1. PC/Laptop
- 2. Software XAMPP Control Panel

### C. LANGKAH KERJA

1. Jalankan XAMPP

### IFNULL()

 Tampilkan 10 data customer yang terdiri dari namalengkap(gabungan contactFirstname dan contactLastname), alamat (diambil dari addressline2, jika tidak ada baru addressline1). alamat tampilkan berupa gabungan alamat dan kota.

```
MariaDB [classicmodels]> SELECT CONCAT(contactFirstName,' ',contactLastName) AS 'Name',
-> CONCAT(IFNULL(addressline2,addressline1),',',city) AS 'Address'
    -> FROM customers
     -> LIMIT 10;
  Name
                                   Address
  Carine Schmitt
                                   | 54, rue Royale, Nantes
                                   8489 Strong St., Las Vegas
  Jean King
  Janine Labrune | 67, rue des Cinquante Otages, Nantes

Jonas Bergulfsen | Erling Skakkes gato 70 Ct

Susan Nelson
  Susan Nelson | 5677 Strong St.,San Rafael
Zbyszek Piestrzeniewicz | ul. Filtrowa 68,Warszawa
                                     Lyonerstr. 34, Frankfurt
  Roland Keitel
  Julie Murphy
                                      5557 North Pendale Street, San Francisco
  Kwai Lee
                                   | 897 Long Airport Avenue, NYC
 0 rows in set (0.027 sec)
```

## **NULLIF()**

nmlgn	almlgn	kota	Keterangan
alaxy Media	   Birugo	Bukittinggi	Birugo
Gamatechno	Anduring	Padang	Anduring
itra Mozaic	Jl. Veteran	Padang Panjang	Jl. Veteran
JJ ENT	Khatib Sulaiman	Padang	Khatib Sulaiman
Green Media	Jambu Air	Bukittinggi	Jambu Air
Tk. Intan	Jl.S.Hatta	Bukittinggi	Jl.S.Hatta
Onexindo	Pauh	Padang	Pauh
Rudi	NULL	Solok	NULL
Citra	NULL	Padang	NULL
Anwar	NULL	NULL	NULL
Raffi	NULL	NULL	NULL
itra	NULL	Padang	NULL
NULL	Padang	Padang	NULL

# Penggabungan IFNULL dengan NULLIF

3. Tampilkan kdlgn,nmlgn,almlgn,kota, dan keterangan, dimana jika nama nilainya kosong beritahu untuk mengisi nama dan beritahu jika alamat dan kota nilainya sama.

kdlgn   Nama		almlgn	kota	Keterangan		
P001	Galaxy Media	+   Birugo	+   Bukittinggi	+   Birugo		
P002	Gamatechno	Anduring	Padang	Anduring		
P003	Citra Mozaic	Jl. Veteran	Padang Panjang	Jl. Veteran		
P004	JJ ENT	Khatib Sulaiman	Padang	Khatib Sulaiman		
P005	Green Media	Jambu Air	Bukittinggi	Jambu Air		
P006	Tk. Intan	Jl.S.Hatta	Bukittinggi	Jl.S.Hatta		
P007	Onexindo	Pauh	Padang	Pauh		
P010	Rudi	NULL	Solok	Alamat sama dengan Kota		
P015	Citra	NULL	Padang	Alamat sama dengan Kota		
P020	Anwar	NULL	NULL	Alamat sama dengan Kota		
P021	Raffi	NULL	NULL	Alamat sama dengan Kota		
P022	Citra	NULL	Padang	Alamat sama dengan Kota		
P030	Nama Masih Kosong	Padang	Padang	Alamat sama dengan Kota		

## **INNER JOIN()**

## STRUKTUR 1:

4. Tampilkan tgl,namabarang,jumlah,harga dan total(jml\*hrg)

tgl,jml,hrg >>ttrans

nmbrg>>tbrg

ttrans dengan tbrg terhubung dengan kdbrg

### CARA1:

```
MariaDB [dbpenjualan]> SELECT ttrans.tgl,tbrg.nmbrg,ttrans.jml,ttrans.hrg,
    -> ttrans.hrg*ttrans.jml AS "Total"
    -> FROM ttrans, tbrg
    -> WHERE ttrans.kdbrg=tbrg.kdbrg;
 tgl
             nmbrg
                                    | jml | hrg
                                                    Total
  2008-09-01 | Komputer Pentium 4
                                        5 | 750000
                                                       3750000
  2008-09-02 | Komputer Pentium 4
                                        20 | 750000
                                                      15000000
 2008-10-01 | Komputer Pentium 4
                                        10 | 750000
                                                      7500000
  2008-10-10
              Komputer Pentium 4
                                        5 | 175000
                                                       875000
  2007-01-10
              Komputer Pentium 4
                                           750000
                                                       3750000
              Komputer Pentium 4
                                           750000
  2006-02-06
                                        12
                                                      9000000
                                           750000
  2005-03-01
              Komputer Pentium 4
                                        10
                                                       7500000
  2006-05-31
              Komputer Pentium 4
                                        40
                                             750000
                                                      30000000
  2008-09-01
              Notebook ASUS 12 Inch
                                            175000
                                                       875000
  2008-09-01
              Notebook ASUS 12 Inch
                                           175000
                                                       875000
              Notebook ASUS 12 Inch
  2008-09-01
                                        15
                                            175000
                                                       2625000
              Notebook ASUS 12 Inch
  2008-09-02
                                        20
                                           175000
                                                       3500000
 2008-09-03
              Notebook ASUS 12 Inch
                                        30
                                           225000
                                                       6750000
              Notebook ASUS 12 Inch
 2007-01-10
                                           175000
                                                       175000
 2008-09-01
              Disket
                                        20
                                             25000
                                                       500000
              Disket
  2007-01-10
                                             25000
                                                        75000
              Hardisk Ext WD 500GB
                                        10
  2008-09-02
                                             220000
                                                       2200000
  2005-03-01
              Hardisk Ext WD 500GB
                                        15
                                             220000
                                                       3300000
 2008-09-01 | Flasdisk Kingston 8GB
                                        10
                                              50000
                                                        500000
 2008-09-03 | Flasdisk Kingston 8GB |
                                        30 I
                                              50000
                                                       1500000
20 rows in set (0.018 sec)
```

### CARA 2:

tgl	nmbrg	jml	hrg	Total
 2008-09-01	+   Komputer Pentium 4	+   5	+   750000	+   3750000
2008-09-02	Komputer Pentium 4	20	750000	15000000
2008-10-01	Komputer Pentium 4	10	750000	7500000
2008-10-10	Komputer Pentium 4	5	175000	875000
2007-01-10	Komputer Pentium 4	5	750000	3750000
2006-02-06	Komputer Pentium 4	12	750000	9000000
2005-03-01	Komputer Pentium 4	10	750000	7500000
2006-05-31	Komputer Pentium 4	40	750000	30000000
2008-09-01	Notebook ASUS 12 Inch	5	175000	875000
2008-09-01	Notebook ASUS 12 Inch	5	175000	875000
2008-09-01	Notebook ASUS 12 Inch	15	175000	2625000
2008-09-02	Notebook ASUS 12 Inch	20	175000	3500000
2008-09-03	Notebook ASUS 12 Inch	30	225000	6750000
2007-01-10	Notebook ASUS 12 Inch	1	175000	175000
2008-09-01	Disket	20	25000	500000
2007-01-10	Disket	3	25000	75000
2008-09-02	Hardisk Ext WD 500GB	10	220000	2200000
2005-03-01	Hardisk Ext WD 500GB	15	220000	3300000
2008-09-01	Flasdisk Kingston 8GB	10	50000	500000
2008-09-03	Flasdisk Kingston 8GB	30	50000	1500000

# $5. \ \ \, Tampilkan tgl,kdbrg,kdlgn,jumlah,harga$

tgl,jml,hrg >>ttrans

nmbrg>>tbrg

ttrans dengan tbrg terhubung dengan kdbrg

tgl	kdbrg	nmbrg	kdlgn	jml	hrg
2008-09-01	B001	Komputer Pentium 4	P001	+   5	   750000
2008-09-02	B001	Komputer Pentium 4	P002	20	750000
2008-10-01	B001	Komputer Pentium 4	P003	10	750000
2008-10-10	B001	Komputer Pentium 4	P002	5	175000
2007-01-10	B001	Komputer Pentium 4	P003	5	750000
2006-02-06	B001	Komputer Pentium 4	P004	12	750000
2005-03-01	B001	Komputer Pentium 4	P002	10	750000
2006-05-31	B001	Komputer Pentium 4	P001	40	750000
2008-09-01	B002	Notebook ASUS 12 Inch	P001	5	175000
2008-09-01	B002	Notebook ASUS 12 Inch	P001	5	175000
2008-09-01	B002	Notebook ASUS 12 Inch	P002	15	175000
2008-09-02	B002	Notebook ASUS 12 Inch	P002	20	175000
2008-09-03	B002	Notebook ASUS 12 Inch	P003	30	225000
2007-01-10	B002	Notebook ASUS 12 Inch	P003	1	175000
2008-09-01	B003	Disket	P001	20	25000
2007-01-10	B003	Disket	P003	3	25000
2008-09-02	B004	Hardisk Ext WD 500GB	P003	10	220000
2005-03-01	B004	Hardisk Ext WD 500GB	P002	15	220000
2008-09-01	B005	Flasdisk Kingston 8GB	P002	10	50000
2008-09-03	B005	Flasdisk Kingston 8GB	P003	30	50000

6. Tampilkan tgl,namapelanggan,namabarang,jml,harga,total. hanya 5 data total tertinggi.

```
tgl,jml,hrg=>ttrans
nmlgn=>tpelanggan
nmbrg=>tbrg
```

```
MariaDB [dbpenjualan]> SELECT tgl,nmlgn,nmbrg,jml,hrg, jml*hrg AS 'Total'
     -> FROM tbrg, ttrans, tpelanggan
     -> WHERE tbrg.kdbrg = ttrans.kdbrg AND ttrans.kdlgn = tpelanggan.kdlgn
     -> ORDER BY Total DESC
     -> LIMIT 5;
  tgl
                 nmlgn
                                      nmbrg
                                                                    | jml | hrg
                                                                                          Total
  2006-05-31 | Galaxy Media | Komputer Pentium 4 | 40 | 750000
2008-09-02 | Gamatechno | Komputer Pentium 4 | 20 | 750000
2006-02-06 | JJ ENT | Komputer Pentium 4 | 12 | 750000
2005-03-01 | Gamatechno | Komputer Pentium 4 | 10 | 750000
                                                                                            30000000
                                                                                            15000000
                                                                                             9000000
                                                                                             7500000
                                                                      10 | 750000 |
  2008-10-01 | Citra Mozaic | Komputer Pentium 4 |
                                                                                             7500000
  rows in set (0.002 sec)
```

## 7. Tampilkan NamaBarang dan Namapelanggan

```
MariaDB [dbpenjualan]> SELECT nmbrg AS 'Nama Barang', nmlgn AS 'Nama Pelanggan'
     -> FROM tbrg, ttrans, tpelanggan
     -> WHERE tbrg.kdbrg = ttrans.kdbrg AND ttrans.kdlgn = tpelanggan.kdlgn;
                    Nama Pelanggan
  Nama Barang
  Komputer Pentium 4 | Galaxy Media
 Komputer Pentium 4 | Garaxy Media
Komputer Pentium 4 | Gamatechno
Komputer Pentium 4 | Citra Mozaic
Komputer Pentium 4 | Citra Mozaic
Komputer Pentium 4 | Citra Mozaic
Komputer Pentium 4 | JJ ENT
Komputer Pentium 4 | Gamatechno
Komputer Pentium 4 | Galaxy Media
  Notebook ASUS 12 Inch
                                 Galaxy Media
  Notebook ASUS 12 Inch
                                 Galaxy Media
  Notebook ASUS 12 Inch
                                 Gamatechno
  Notebook ASUS 12 Inch
                                 Gamatechno
  Notebook ASUS 12 Inch
                                 Citra Mozaic
                                 Citra Mozaic
  Notebook ASUS 12 Inch
  Disket
                                 Galaxy Media
  Disket
                                 Citra Mozaic
  Hardisk Ext WD 500GB
                               | Citra Mozaic
  Hardisk Ext WD 500GB
                               Gamatechno
  Flasdisk Kingston 8GB | Gamatechno
  Flasdisk Kingston 8GB | Citra Mozaic
20 rows in set (0.001 sec)
```

## **STRUKTUR 2:**

8. Tampilkan tgl,namabarang,jumlah,harga dan total(jml\*hrg)

gl	nmbrg	jml	hrg	Total
	+	J=		+
2008-09-01	Komputer Pentium 4	5	750000	3750000
2008-09-02	Komputer Pentium 4	20	750000	15000000
2008-10-01	Komputer Pentium 4	10	750000	7500000
2008-10-10	Komputer Pentium 4	5	175000	875000
2007-01-10	Komputer Pentium 4	5	750000	3750000
2006-02-06	Komputer Pentium 4	12	750000	9000000
2005-03-01	Komputer Pentium 4	10	750000	7500000
2006-05-31	Komputer Pentium 4	40	750000	30000000
2008-09-01	Notebook ASUS 12 Inch	5	175000	875000
2008-09-01	Notebook ASUS 12 Inch	5	175000	875000
2008-09-01	Notebook ASUS 12 Inch	15	175000	2625000
2008-09-02	Notebook ASUS 12 Inch	20	175000	3500000
2008-09-03	Notebook ASUS 12 Inch	30	225000	6750000
2007-01-10	Notebook ASUS 12 Inch	1	175000	175000
2008-09-01	Disket	20	25000	500000
2007-01-10	Disket	3	25000	75000
	Hardisk Ext WD 500GB	10	220000	2200000
2005-03-01	Hardisk Ext WD 500GB	15	220000	3300000
2008-09-01	Flasdisk Kingston 8GB	10	50000	500000
2008-09-03	_	30	50000	1500000

9. Tampilkan tgl,namapelanggan,namabarang,jml,harga,total. hanya 5 data total tertinggi untuk pelanggan selain kode P001

## CARA1:

```
MariaDB [dbpenjualan]> SELECT tgl,nmlgn,nmbrg,jml,hrg, jml*hrg AS 'Total'
    -> FROM tbrg JOIN ttrans JOIN tpelanggan
    -> ON tbrg.kdbrg = ttrans.kdbrg AND ttrans.kdlgn = tpelanggan.kdlgn
-> WHERE tpelanggan.kdlgn <> 'P001'
    -> ORDER BY Total DESC
    -> LIMIT 5;
  tgl
               nmlgn
                                                         | jml
                                                                hrg
                                                                            Total
                               nmbrg
  2008-09-02
                Gamatechno
                                Komputer Pentium 4
                                                             20
                                                                  750000
                                                                            15000000
  2006-02-06
                JJ ENT
                                                             12
                                Komputer Pentium 4
                                                                  750000
                                                                             9000000
  2008-10-01
                Citra Mozaic
                                Komputer Pentium 4
                                                             10
                                                                  750000
                                                                             7500000
  2005-03-01
                Gamatechno
                                Komputer Pentium 4
                                                             10
                                                                  750000
                                                                             7500000
  2008-09-03
                Citra Mozaic
                                Notebook ASUS 12 Inch
                                                                  225000
                                                                             6750000
                                                             30
 rows in set (0.001 sec)
```

### CARA2:

```
MariaDB [dbpenjualan]> SELECT tgl,nmlgn,nmbrg,jml,hrg, jml*hrg AS 'Total'
   -> FROM tbrg JOIN ttrans ON tbrg.kdbrg = ttrans.kdbrg
   -> JOIN tpelanggan ON ttrans.kdlgn = tpelanggan.kdlgn
   -> WHERE tpelanggan.kdlgn <> 'P001'
   -> ORDER BY Total DESC
    -> LIMIT 5;
                                                    | jml | hrg
 tgl
             nmlgn
                                                                    | Total
                            nmbrg
  2008-09-02
              Gamatechno
                             Komputer Pentium 4
                                                       20
                                                             750000
                                                                      15000000
  2006-02-06
              JJ ENT
                              Komputer Pentium 4
                                                       12
                                                            750000
                                                                       9000000
  2008-10-01
              Citra Mozaic |
                              Komputer Pentium 4
                                                             750000
                                                       10
                                                                       7500000
  2005-03-01
              Gamatechno
                             Komputer Pentium 4
                                                             750000
                                                       10
                                                                       7500000
              Citra Mozaic
                             Notebook ASUS 12 Inch
  2008-09-03
                                                       30
                                                             225000
                                                                       6750000
  rows in set (0.001 sec)
```

#### D. TUGAS DAN PEMBAHASAN

### **DBPENJUALAN**

1. Tampilkan kode barang, nama barang, satuan, jumlah dan harga barang utuk barang yang memiliki satuan unit.

### STRUKTUR 1:

```
MariaDB [dbpenjualan]> SELECT tbrg.kdbrg, nmbrg, satuan, jml, hrg
   -> FROM tbrg,ttrans
   -> WHERE tbrg.kdbrg = ttrans.kdbrg AND satuan = 'Unit';
 kdbrg | nmbrg
                                | satuan | jml |
                                                  hrg
         Komputer Pentium 4
 R001
                                  Unit
                                                  750000
         Komputer Pentium 4
 B001
                                  Unit
                                             20 I
                                                  750000
         Komputer Pentium 4
 B001
                                  Unit
                                             10
                                                  750000
 B001
         Komputer Pentium 4
                                  Unit
                                                  175000
 B001
         Komputer Pentium 4
                                  Unit
                                                  750000
 B001
         Komputer Pentium 4
                                  Unit
                                             12
                                                  750000
         Komputer Pentium 4
 B001
                                  Unit
                                             10
                                                  750000
         Komputer Pentium 4
                                             40
                                                  750000
 B001
                                  Unit
         Notebook ASUS 12 Inch
                                                  175000
 B002
                                  Unit
 B002
         Notebook ASUS 12 Inch
                                  Unit
                                                  175000
         Notebook ASUS 12 Inch
 B002
                                  Unit
                                             15
                                                  175000
 B002
         Notebook ASUS 12 Inch
                                             20
                                  Unit
                                                  175000
 B002
         Notebook ASUS 12 Inch
                                  Unit
                                             30
                                                  225000
 B002
         Notebook ASUS 12 Inch
                                  Unit
                                                  175000
4 rows in set (0.005 sec)
```

### STRUKTUR 2:

```
MariaDB [dbpenjualan]> SELECT tbrg.kdbrg, nmbrg, satuan, jml, hrg
    -> FROM tbrg JOIN ttrans ON tbrg.kdbrg = ttrans.kdbrg
    -> WHERE satuan ='Unit';
                                   satuan | jml
  kdbrg | nmbrg
                                                    hrg
                                    Unit
  B001
          Komputer Pentium 4
                                                     750000
          Komputer Pentium 4
                                    Unit
                                               20
                                                     750000
  B001
          Komputer Pentium 4
  B001
                                    Unit
                                               10
                                                     750000
          Komputer Pentium 4
  B001
                                    Unit
                                                    175000
          Komputer Pentium 4
                                    Unit
                                                    750000
  B001
  B001
          Komputer Pentium 4
                                    Unit
                                               12
                                                    750000
  B001
          Komputer Pentium 4
                                    Unit
                                               10
                                                    750000
          Komputer Pentium 4
                                               40
  B001
                                    Unit
                                                    750000
  B002
          Notebook ASUS 12 Inch
                                    Unit
                                                    175000
          Notebook ASUS 12 Inch
                                                    175000
  B002
                                    Unit
  B002
          Notebook ASUS 12 Inch
                                               15
                                                    175000
                                    Unit
  B002
          Notebook ASUS 12 Inch
                                    Unit
                                               20
                                                    175000
  B002
          Notebook ASUS 12 Inch
                                    Unit
                                               30
                                                    225000
  B002
          Notebook ASUS 12 Inch
                                                    175000
                                   Unit
14 rows in set (0.001 sec)
```

2. Tampilkan nama pelanggan, alamat, jumlah, dan harga barang untuk barang yang dibeli pada tahun 2007.

```
MariaDB [dbpenjualan]> SELECT nmlgn, almlgn, ttrans.tgl, ttrans.jml, hrg
   -> FROM ttrans JOIN tpelanggan ON ttrans.kdlgn = tpelanggan.kdlgn
   -> WHERE tgl BETWEEN 20070101 AND 20071231;
 nmlgn
                almlgn
                               tgl
                                            jm1
 Citra Mozaic
                               2007-01-10
                                                    750000
                Jl. Veteran
                Jl. Veteran
                               2007-01-10
                                                    175000
 Citra Mozaic
                                               1
 Citra Mozaic
                               2007-01-10
                                                     25000
                Jl. Veteran
 rows in set (0.004 sec)
```

3. Tampilkan nama barang yang dibeli oleh pelanggan yang bernama gamatecno

4. Siapa saja pelanggan yang membeli flashdisk ditahun 2008?

```
MariaDB [dbpenjualan]> SELECT nmbrg, nmlgn, tgl
-> FROM tbrg JOIN ttrans ON tbrg.kdbrg = ttrans.kdbrg
-> JOIN tpelanggan ON ttrans.kdlgn = tpelanggan.kdlgn
-> WHERE tbrg.nmbrg LIKE '%Flashdisk%' AND ttrans.tgl BETWEEN '20080101' AND '20081231';
Empty set (0.001 sec)

MariaDB [dbpenjualan]> SELECT nmbrg, nmlgn, tgl
-> FROM tbrg JOIN ttrans ON tbrg.kdbrg = ttrans.kdbrg
-> JOIN tpelanggan ON ttrans.kdlgn = tpelanggan.kdlgn
-> WHERE tbrg.nmbrg ='Flashdisk' AND ttrans.tgl = '2008';
Empty set, 1 warning (0.001 sec)
```

### **DBPERKULIAHAN**

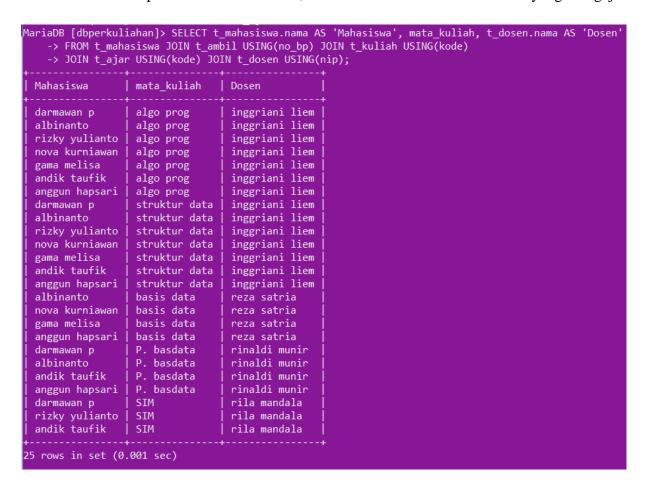
5. Tampilkan nama mahasiswa, nama mata kuliah yang diambil dan nilai

```
MariaDB [dbperkuliahan]> SELECT DISTINCT nama,mata_kuliah,nilai
   -> FROM t_mahasiswa JOIN t_ambil ON t_mahasiswa.no_bp = t_ambil.no_bp
   -> JOIN t_kuliah ON t_ambil.kode = t_kuliah.kode;
                 mata kuliah
                                 | nilai |
 darmawan p
                  algo prog
 albinanto
                   algo prog
 rizky yulianto
                   algo prog
 nova kurniawan
                   algo prog
 gama melisa
                   algo prog
 andik taufik
                   algo prog
 anggun hapsari
                  algo prog
 rizky yulianto
                  P.pascal
 nova kurniawan
                  P.pascal
                                   В
 gama melisa
                  P.pascal
 darmawan p
                  struktur data
                                   В
                   struktur data
 albinanto
 rizky yulianto | struktur data
                                   В
 nova kurniawan | struktur data
                  struktur data
struktur data
 gama melisa
 andik taufik
 anggun hapsari | struktur data
 albinanto
                  basis data
 nova kurniawan | basis data
                   basis data
 gama melisa
                  basis data
 anggun hapsari
                                   В
 darmawan p
                  P. basdata
                  P. basdata
 albinanto
                                  Α
                  P. basdata
 andik taufik
                  P. basdata
 anggun hapsari
 darmawan p
 rizky yulianto
andik taufik
                   SIM
28 rows in set (0.001 sec)
```

```
MariaDB [dbperkuliahan]> SELECT DISTINCT nama,mata_kuliah,nilai
   -> FROM t mahasiswa JOIN t ambil USING(no bp) JOIN t kuliah USING(kode);
                nama
 darmawan p
              | algo prog
 albinanto
                               Ιв
                 algo prog
 rizky yulianto |
                 algo prog
                               | C
 nova kurniawan |
                 algo prog
 gama melisa
                               B
                 algo prog
 andik taufik
                 algo prog
                               | D
 anggun hapsari
                 algo prog
 rizky yulianto
                 P.pascal
 nova kurniawan
                 P.pascal
                               Ιв
 gama melisa
                | P.pascal
 darmawan p | struktur data | B
albinanto | struktur data | C
 rizky yulianto | struktur data |
 nova kurniawan | struktur data | B
 gama melisa | struktur data | C
 andik taufik
                 struktur data |
                                C
 anggun hapsari |
                 struktur data
                 basis data
 albinanto
                               ΙD
                 basis data
 nova kurniawan
                               ΙA
 gama melisa
                 basis data
 anggun hapsari |
                 basis data
                               В
 darmawan p
                 P. basdata
                               1 c
               P. basdata
 albinanto
                               A
 andik taufik
                P. basdata
                               | B
 anggun hapsari | P. basdata
                               1.0
 darmawan p
                               | C
 rizky yulianto | SIM
                               B
 andik taufik
               SIM
                               ΙΔ
28 rows in set (0.023 sec)
```

6. Tampilkan siapa saja mahasiswa yang mengambil mata kuliah Basis Data

7. Tampilkan nama mahasiswa, nama mata kuliah dan nama dosen yang mengajar



### **CLASSICMODELS**

9. Tampilkan nama lengkap karyawan (gabungan firstname dan lastname), jobtitle, country, state dengan ketentuan :

CA --> California

NY --> New York

MA --> Massachusetts

Seleihnya dibuat other, untuk karyawan yang berada di USA saja.

```
MariaDB [classicmodels]> SELECT CONCAT(firstName,' ',lastName) AS 'FullName', employees.jobtitle, country,
   -> CASE state
-> WHEN 'CA' THEN 'California'
   -> WHEN 'NY' THEN 'New York'
   -> WHEN 'MA' THEN 'Massachusetts'
   -> ELSE 'Other'
   -> END AS 'State'
   -> FROM employees INNER JOIN offices USING(officeCode)
    -> WHERE country LIKE '%USA%';
 FullName
                    jobtitle
                                          country | State
 Diane Murphy
                    President
                                          USA
                                                    California
 Mary Patterson
                    VP Sales
                                          USA
                                                     California
 Jeff Firrelli
                    VP Marketing
                                          USA
                                                     California
                    Sales Manager (NA)
 Anthony Bow
                                          USA
                                                    California
 Leslie Jennings
                    Sales Rep
                                          USA
                                                    California
 Leslie Thompson
                    Sales Rep
                                                     California
 Julie Firrelli
                    Sales Rep
                                          USA
                                                    Massachusetts
 Steve Patterson
                    Sales Rep
                                          USA
                                                    Massachusetts
 Foon Yue Tseng
                    Sales Rep
                                          USA
                                                    New York
 George Vanauf
                                          USA
                                                    New York
                    Sales Rep
10 rows in set (0.004 sec)
```

10. Tampilkan nama customer, orderdate, lama waktu tunggu yang dibutuhkan dari waktu pengiriman (shippeddate) hingga waktu pemesanan dari table order (orderdate). untuk barang yg diorder pada Januari - Agustus 2004 dan masa tunggu diatas 5 hari, urutkan dari waktu tunggu terpendek.

```
MariaDB [classicmodels]> SELECT customerName, orderDate, shippedDate,
    -> CONCAT(TIMESTAMPDIFF(DAY, orderDate, shippedDate), 'Hari') AS 'Waktu Tunggu'
    -> FROM customers INNER JOIN orders USING(customerNumber)
    -> WHERE orderDate BETWEEN '20040101' AND '20040831'
   -> AND TIMESTAMPDIFF(DAY, orderDate, shippedDate) > 5
-> ORDER BY 'Waktu Tunggu' ASC;
                            orderDate | shippedDate | Waktu Tunggu
 customerName
                              2004-07-23
 La Rochelle Gifts
                                            2004-07-29
                                                          6Hari
                              2004-08-09
                                           2004-08-15
 Euro+ Shopping Channel
                                                          6Hari
                                           2004-03-08
 Saveley & Henriot, Co.
                              2004-03-02
                                                          6Hari
                              2004-01-12
                                            2004-01-20
 Osaka Souveniers Co.
                                                          8Hari
 Osaka Souveniers Co.
                              2004-04-13
                                            2004-04-20
                                                          7Hari
 Online Mini Collectables
                              2004-08-02
                                            2004-08-08
                                                          6Hari
 Mini Caravy
                              2004-04-13
                                            2004-04-19
                                                          6Hari
                              2004-05-18
 Tekni Collectables Inc.
                                            2004-05-24
                                                          6Hari
                              2004-03-19
                                            2004-03-25
 CAF Imports
                                                          6Hari
 Tokyo Collectables, Ltd
                              2004-06-15
                                           2004-06-23
                                                          8Hari
10 rows in set (0.009 sec)
```

11. Tampilkan nama kontak customer lengkap dengan huruf kapital, alamat lengkap (addressline1 + state), creditlimit dan nama product yang dibeli oleh customer tersebut, untuk pelanggan yang berada di state MA,MY, NV, CA dan NJ dan credit limit antara 50.000 – 100.000, hanya untuk productname adalah Harley Urutkan dari creditlimit tertinggi

```
',contactLastName',
       CONCAT (addressline), 'STATE', state) AS 'Address', creditLimit, productNam FROM customers JOIN orders USING(customerNumber)
       JOIN orderDetails USING(orderNumber) JOIN products USING(productCode)
WHERE state IN ('MA','My','NV','CA','NJ') AND creditLimit BETWEEN '50000' AND '100000'
AND productName LIKE '%harley%'
       ORDER BY creditLimit DESC;
FullName
                      | Address
                                                                     | creditLimit | productName
                                                                                          1969 Harley Davidson Ultimate Chopper
 JULIE YOUNG
                        78934 Hillside Dr.STATECA
                                                                           90700.00
                         78934 Hillside Dr.STATECA
                                                                                          2003 Harley-Davidson Eagle Drag Bike
 JULIE YOUNG
                                                                           90700.00
                                                                           90700.00
 JULIE YOUNG
                         78934 Hillside Dr.STATECA
                                                                                          1936 Harley Davidson El Knucklehead
                        1785 First StreetSTATEMA
1785 First StreetSTATEMA
9408 Furth CircleSTATECA
9408 Furth CircleSTATECA
                                                                           85800.00
                                                                                          1969 Harley Davidson Ultimate Chopper
                                                                                         2003 Harley-Davidson Eagle Drag Bike
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
 VIOLETA BENITEZ |
                                                                           85800 00
 JURI HASHIMOTO
                                                                           84600.00
 JURI HASHIMOTO
                                                                           84600.00
                                                                           84600.00
 JURI HASHIMOTO
                         9408 Furth CircleSTATECA
                                                                                          1936 Harley Davidson El Knucklehead
                                                                                          2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
 JURI HASHIMOTO
                                                                           84600.00
 JURI HASHIMOTO
                                                                           84600.00
                        5557 North Pendale StreetSTATECA
5557 North Pendale StreetSTATECA
 JULIE MURPHY
JULIE MURPHY
                                                                                          1969 Harley Davidson Ultimate Chopper
                                                                           64600.00
                                                                                          2003 Harley-Davidson Eagle Drag Bike
 JULIE MURPHY
                        5557 North Pendale StreetSTATECA
                                                                            64600.00
                                                                                          1936 Harley Davidson El Knucklehead
3 rows in set (0.018 sec)
```

12. Tampilkan nama pelanggan, kontak lengkap pelanggan yang membeli barang dengan nama harley

```
ariaDB [classicmodels]> SELECT customerName, CONCAT(contactFirstName,' ',contactLastName) AS 'ContactFullName', productName
-> FROM customers JOIN orders USING(customerNumber)
-> JOIN orderDetails USING(orderNumber) JOIN products USING(productCode)
-> WHERE productName LIKE '%harley%';
 customerName
                                                                                                                    | ContactFullName
                                                                                                                                                                                                | productName
 Atelier graphique
Australian Collectors, Co.
                                                                                                                         Carine Schmitt
                                                                                                                                                                                                        1936 Harley Davidson El Knucklehead
                                                                                                                                                                                                         2003 Harley-Davidson Eagle Drag Bike
                                                                                                                       Peter Ferguson
Peter Ferguson
Peter Ferguson
Peter Ferguson
Peter Ferguson
Janine Labrune
Janine Labrune
Janine Labrune
                                                                                                                                                                                                       1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
 Australian Collectors, Co.
Australian Collectors, Co.
Australian Collectors, Co.
La Rochelle Gifts
                                                                                                                                                                                                        2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Choppe
                                                                                                                                                                                                       1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
1969 Harley Davidson Ultimate Chopper
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
 La Rochelle Gifts
La Rochelle Gifts
                                                                                                                        Janine Labrune
Jonas Bergulfsen
Julie Murphy
Julie Murphy
Julie Murphy
 La Rochelle Gifts
Baane Mini Imports
 Mini Wheels Co.
Mini Wheels Co.
Mini Wheels Co.
Land of Toys Inc.
Euro+ Shopping Channel
Euro+ Shopping Channel
Diecast Classics Inc.
Diecast Classics Inc.
Diecast Classics Inc.
Diecast Classics Inc.
                                                                                                                                                                                                     1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson Ultimate Chopper
2003 Harley Davidson Ultimate Chopper
2003 Harley Davidson Ultimate Chopper
2003 Harley Davidson Eagle Drag Bike
                                                                                                                        Kwai Lee
Kwai Lee
Kwai Lee
Kwai Lee
                                                                                                                       Kwai Lee
Kwai Lee
Diego Freyre
Diego Freyre
Diego Freyre
Kelvin Leong
Kelvin Leong
                                                                                                                                                                                                       2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
                                                                                                                                                                                                      1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson El Knucklehead
1969 Harley Davidson Engle Drag Bike
19683 Harley-Davidson Eagle Drag Bike
Diecast Classics Inc.
Diecast Classics Inc.
Technics Stores Inc.
Herkku Gifts
                                                                                                                        Kelvin Leong
Juri Hashimoto
Juri Hashimoto
                                                                                                                         Juri Hashimoto
                                                                                                                         Juri Hashimoto
Juri Hashimoto
                                                                                                                        Juri Hashimoto
Veysel Oeztan
Veysel Oeztan
Veysel Oeztan
Martine Ranc
Martine Ranc
Martine Ranc
Julie King
Julie King
Julie King
                                                                                                                                                                                                  1999 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
  Herkku Gifts
   Herkku Gifts
 Daedalus Designs Imports
Daedalus Designs Imports
  Gift Depot Inc.
Gift Depot Inc.
                                                                                                                                                                                                         1936 Harley Davidson El Knucklehead
```

```
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
     Toys4GrownUps.com
Toys4GrownUps.com
                                                                                                                                                                                                                                       Julie Young
                                                                                                                                                                                                                                 Julie Young
Julie Young
Daniel Da Silva
Daniel Da Silva
Daniel Da Silva
Adrian Huxley
     Toys4GrownUps.com
 Lyon Souveniers
   Lvon Souveniers
                                                                                                                                                                                                                                                                                                                                                                                1969 Harley Davidson Ultimate Chopper
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
2003 Harley-Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson Ultimate Chopper
2003 Harley-Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson Ultimate Chopper
2003 Harley-Davidson El Knucklehead
1969 Harley Davidson Ultimate Chopper
2003 Harley-Davidson El Knucklehead
2003 Harley-Davidson El Knucklehead
2003 Harley-Davidson El Knucklehead
2003 Harley-Davidson El Knucklehead
               ouveniers And Things Co.
 Marta's Replicas Co.
Marta's Replicas Co.
                                                                                                                                                                                                                                  Marta Hernandez
Marta Hernandez
                                                                                                                                                                                                                             Marta Hernandez
Marta Hernandez
Steve Frick
Steve Frick
Julie Brown
Julie Brown
Julie Brown
Mike Graham
Mike Graham
William Brown
William Brown
William Brown
William Brown
Hilliam Hill
 Marta's Replicas Co.
Mini Classics
Mini Classics
Mini Classics
Corporate Gift Ideas Co.
Corporate Gift Ideas Co.
Corporate Gift Ideas Co.
 Down Under Souveniers, Inc
Down Under Souveniers, Inc
   Down Under Souveniers, Inc
Down Under Souveniers, Inc
Tekni Collectables Inc.
Tekni Collectables Inc.
Tekni Collectables Inc.
Australian Gift Network, Co
Australian Gift Network, Co
Reims Collectables
Salzburg Collectables
Tokyo Collectables, Ltd
Tokyo Collectables, Ltd
Auto Canal, Patif
                                                                                                                                                                                                                                                                                                                                                                                        1969 Harley Davidson Ultimate Chopper
1969 Harley Davidson Ultimate Chopper
                                                                                                                                                                                                                                                                                                                                                                                   1969 Harley Davidson Ultimate Chopper 2003 Harley-Davidson Eagle Drag Bike 1936 Harley Davidson El Knucklehead 1969 Harley Davidson El Knucklehead 1969 Harley Davidson El Knucklehead 1936 Harley Davidson El Knucklehead 1969 Harley Davidson Ultimate Chopper 2003 Harley-Davidson Eagle Drag Bike 1936 Harley Davidson El Knucklehead 1969 Harley Davidson Eagle Drag Bike 1969 Harley-Davidson Eagle Drag Bike
 Auto Canal+ Petit
Auto Canal+ Petit
                                                                                                                                                                                                                                 Dominique Perrier
Dominique Perrier
 Scandinavian Gift Ideas
FunGiftIdeas.com
                                                                                                                                                                                                                                 Violeta Benitez
Violeta Benitez
Motor Mint Distributors Inc.
Kelly's Gift Shop
Kelly's Gift Shop
Kelly's Gift Shop
                                                                                                                                                                                                                                  Rosa Salazar
Tony Snowden
                                                                                                                                                                                                                                                                                                                                                                                       2003 Harley-Davidson Eagle Drag Bike
1936 Harley Davidson El Knucklehead
     rows in set (0.018 sec)
```

13. Tampilkan nama lengkap employee, di city mana employee tsb ditempatkan. Untuk state yang memiliki nilai null, ganti dengan nilai country.

```
MariaDB [classicmodels]> SELECT CONCAT(firstName,' ',lastName) AS 'FullName', city,
   -> IFNULL (state, country) AS state
   -> FROM employees JOIN offices USING(officeCode);
 FullName
                  | city
                                  state
 Diane Murphy
                  || San Francisco | CA
 Mary Patterson
                  | San Francisco
                                  I CA
 Jeff Firrelli
                  | San Francisco
                   | San Francisco
                                   CA
 Anthony Bow
 Leslie Jennings
                   | San Francisco
 Leslie Thompson
                   | San Francisco
                                   CA
 Julie Firrelli
                   Boston
                                    MA
 Steve Patterson
                   Boston
                                    NY
 Foon Yue Tseng
                    NYC
                                    NY
 George Vanauf
                    NYC
 Gerard Bondur
                    Paris
                                    France
 Loui Bondur
                   Paris
                                    France
 Gerard Hernandez
                   Paris
                                    France
                   Paris
 Pamela Castillo
                                    France
 Martin Gerard
                    Paris
                                    France
 Mami Nishi
                    Tokyo
                                    Chiyoda-Ku
 Yoshimi Kato
                                    Chivoda-Ku
                   Lokvo
 William Patterson | Sydney
                                    Australia
 Andy Fixter
                                    Australia
                    Sydney
 Peter Marsh
                    Sydney
                                    Australia
 Tom King
                    Sydney
                                    Australia
 Larry Bott
                   London
                                    UK
 Barry Jones
                   London
23 rows in set (0.001 sec)
```

14. nama product apa saja yang sudah dijual oleh employee yang bernama Leslie Thompson dan siapa nama customer yg membeli product tersebut. Tampilkan hanya untuk product yang dikirim (shippeddate) pada tahun 2003

```
EmployeeName
                       productName
                                                                                    customerName
                                                                                     Signal Gift Stores
Signal Gift Stores
                         1917 Grand Touring Sedan
                         1911 Ford Town Car
1932 Model A Ford J-Coupe
  Leslie Thompson
                                                                                     Signal Gift Stores
  Leslie Thompson
                          1932 Alfa Romeo 8C2300 Spider Sport
                                                                                     Signal Gift Stores
                         1957 Ford Thunderbird
1970 Chevy Chevelle SS 454
1939 Chevrolet Deluxe Coupe
                                                                                     Signal Gift Stores
Signal Gift Stores
  Leslie Thompson
  Leslie Thompson
                                                                                     Signal Gift Stores
                          1938 Cadillac V-16 Presidential Limousine
                                                                                    Signal Gift Stores
Signal Gift Stores
Signal Gift Stores
                         1949 Jaguar XK 120
1952 Citroen-15CV
  Leslie Thompson
  Leslie Thompson
                                                                                     Signal Gift Stores
Signal Gift Stores
Signal Gift Stores
  Leslie Thompson
  Leslie Thompson
                         2002 Chevy Corvette
1936 Mercedes Benz 500k Roadster
  Leslie Thompson
  Leslie Thompson
                          1969 Harley Davidson Ultimate Chopper
                                                                                      Toys4GrownUps.com
                         1996 Moto Guzzi 1100i
2003 Harley-Davidson Eagle Drag Bike
2002 Suzuki XREO
  Leslie Thompson
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                          P-51-D Mustang
                                                                                      Toys4GrownUps.com
                         1936 Harley Davidson El Knucklehead
1997 BMW R 1100 S
                                                                                      Toys4GrownUps.com
 Leslie Thompson
Leslie Thompson
                                                                                      Toys4GrownUps.com
  .
Leslie Thompson
                                                                                      Toys4GrownUps.com
                         1960 BSA Gold Star DBD34
1982 Ducati 900 Monster
 Leslie Thompson
                                                                                     {\sf Toys4GrownUps.com}
  Leslie Thompson
                                                                                     Toys4GrownUps.com
                         1982 Ducati 900 Monster
1900s Vintage Tri-Plane
1997 BMW F650 ST
1982 Ducati 996 R
1974 Ducati 350 Mk3 Desmo
  Leslie Thompson
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                                                                                     Toys4GrownUps.com
                                                                                      Toys4GrownUps.com
  Leslie Thompson
  Leslie Thompson
                                                                                      Toys4GrownUps.com
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                         ATA: B757-300
2002 Suzuki XREO
 Leslie Thompson
                                                                                      Toys4GrownUps.com
 Leslie Thompson
                                                                                      Toys4GrownUps.com
                                                                                     Boards & Toys Co.
Boards & Toys Co.
Men 'R' US Retailers,
                          1912 Ford Model T Delivery Wagon
                          The USS Constitution Ship
1968 Dodge Charger
                         1997 BMW R 1100 S
1928 British Royal Navy Airplane
  Leslie Thompson
                                                                                      Toys4GrownUps.com
 Leslie Thompson
Leslie Thompson
                                                                                      Toys4GrownUps.com
                          1960 BSA Gold Star DBD34
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                          1982 Ducati 900 Monster
                                                                                      Toys4GrownUps.com
 Leslie Thompson
Leslie Thompson
                          1900s Vintage Tri-Plane
1997 BMW F650 ST
                                                                                      Toys4GrownUps.com
                                                                                      Toys4GrownUps.com
  Leslie Thompson
                          1982 Ducati 996 R
                                                                                      Toys4GrownUps.com
                         1974 Ducati 350 Mk3 Desmo
2002 Yamaha YZR M1
ATA: B757-300
 Leslie Thompson
Leslie Thompson
Leslie Thompson
                                                                                      Toys4GrownUps.com
                                                                                      Toys4GrownUps.com
                                                                                      Toys4GrownUps.com
                         2002 Suzuki XREO
1912 Ford Model T Delivery Wagon
The USS Constitution Ship
 Leslie Thompson
                                                                                      Toys4GrownUps.com
                                                                                     Boards & Toys Co.
Boards & Toys Co.
  Leslie Thompson
  Leslie Thompson
                                                                                     Boards & Toys Co.
Men 'R' US Retailers, Ltd.
  Leslie Thompson
                          1968 Dodge Charger
                         1969 Dodge Charger
1948 Porsche 356-A Roadster
1992 Ferrari 360 Spider red
  Leslie Thompson
  Leslie Thompson
  Leslie Thompson
                         1982 Lamborghini Diablo
1956 Porsche 356A Coupe
1930 Buick Marquette Phaeton
  Leslie Thompson
                                                                                     Men 'R' US Retailers, Ltd.
West Coast Collectables Co.
  Leslie Thompson
  Leslie Thompson
                         American Airlines: B767-300
F/A 18 Hornet 1/72
 Leslie Thompson
                                                                                     West Coast Collectables Co.
41 rows in set (0.009 sec)
```

15. Tampilkan semua data dari tabel payments tetapi hanya untuk pelanggan dengan customernumber = 124, untuk payments yang terjadi pada tahun 2004 saja dan amount diatas 50000. Tampilkan customername, paymentdate dengan format tanggal, nama bulan dan tahun.

```
MariaDB [classicmodels]> SELECT customerNumber, checkNumber, date_format(paymentDate, '%d-%m-%Y') AS 'PaymentDate', amount, customerName
-> FROM payments JOIN customers USING(customerNumber)
-> WHERE customerNumber = '124' AND YEAR(paymentDate) = '2004' AND amount > 50000;
| customerNumber | checkNumber | PaymentDate | amount | customerName |
| 124 | BG255406 | 28-08-2004 | 85410.87 | Mini Gifts Distributors Ltd. |
| 124 | HR86578 | 02-11-2004 | 55639.66 | Mini Gifts Distributors Ltd. |
| 2 rows in set (0.007 sec)
```

16. Jika profit didapatkan dari selisih harga jual dan harga beli, maka keuntungan tiap2 barang adalah selisih harga dikalian dengan quantityorder. berapa kira-kira kerugian yang didapatkan oleh perusahaan untuk barang yang tidak jadi dibeli(cancelled).

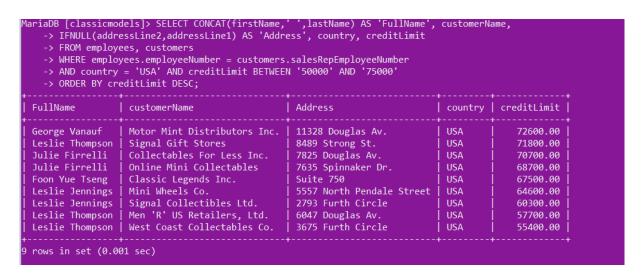
```
MariaDB [classicmodels]> SELECT priceEach, buyPrice, (priceEach-buyPrice) AS 'Profit',
    -> (priceEach-buyPrice) * quantityOrdered AS 'Keuntungan',
    -> status, (priceEach*quantityOrdered) - (buyPrice*quantityOrdered) AS 'Loss'
    -> FROM orderDetails JOIN products USING(productCode) JOIN orders USING(orderNumber)
    -> WHERE comments LIKE '%cancel%';
  priceEach | buyPrice | Profit | Keuntungan |
                                                            Loss
                                                 Cancelled
                                      1675.52
     123.76
                 85.68
                           38.08
                                                             1675.52
                                      2779.95
                                                             2779.95
     141.92
                 77.27
                           64.65
                                                 Cancelled
      69.68
                 51.61
                           18.07
                                                              831.22
                                       831.22
                                                 Cancelled
                 64.58
                           20.12
                                       684.08
      84.70
                                                 Cancelled
                                                              684.08
                 82.34
                           28.26
                                       932.58
                                                 Cancelled
                                                              932.58
     110.60
      54.81
                 34.25
                           20.56
                                       431.76
                                                 Cancelled
                                                              431.76
      77.00
                 46.91
                           30.09
                                       601.80
                                                 Cancelled
                                                              601.80
      64.44
                 26.30
                           38.14
                                      1220.48
                                                 Cancelled
                                                             1220.48
      73.80
                 48.64
                           25.16
                                       729.64
                                                 Cancelled
                                                              729.64
                           32.00
      66.00
                 34.00
                                      1376.00
                                                 Cancelled
                                                             1376.00
      87.80
                 39.83
                           47.97
                                      1391.13
                                                 Cancelled
                                                             1391.13
                 33.97
                           28.19
      62.16
                                      1296.74
                                                 Cancelled
                                                             1296.74
      85.14
                 51.09
                           34.05
                                       817.20
                                                 Cancelled
                                                              817.20
                 53.63
                           29.79
                                                 Cancelled
      83.42
                                       834.12
                                                              834.12
                                                              397.60
      42.71
                 32.77
                           9.94
                                       397.60
                                                 Cancelled
      43.68
                 33.30
                           10.38
                                       394.44
                                                              394.44
                                                 Cancelled
      82.79
                 49.00
                           33.79
                                       810.96
                                                 Cancelled
                                                              810.96
     105.04
                 66.74
                           38.30
                                      1800.10
                                                 Cancelled
                                                             1800.10
                 36.23
                           30.42
      66.65
                                       821.34
                                                 Cancelled
                                                              821.34
      86.90
                 66.92
                           19.98
                                       899.10
                                                 Cancelled
                                                              899.10
      63.97
                 33.02
                           30.95
                                       742.80
                                                 Cancelled
                                                              742.80
      43.20
                 27.06
                           16.14
                                       548.76
                                                 Cancelled
                                                              548.76
      75.81
                 51.15
                           24.66
                                       567.18
                                                 Cancelled
                                                              567.18
                 59.33
                           39.15
                                       978.75
                                                 Cancelled
                                                              978.75
      98.48
                                                              998.40
                           25.60
      80.00
                 54.40
                                       998.40
                                                 Cancelled
                 95.34
     157.60
                           62.26
                                      1494.24
                                                 Cancelled
                                                             1494.24
                                                              594.22
     102.17
                 75.16
                           27.01
                                       594.22
                                                 Cancelled
      67.03
                 31.92
                           35.11
                                       877.75
                                                 Cancelled
                                                              877.75
     109.40
                 58.73
                           50.67
                                      2077.47
                                                 Cancelled
                                                             2077.47
```

87.80	39.83	47.97	1301 13	Cancelled	1301 13	
62.16	33.97	28.19		Cancelled		
85.14	51.09	34.05		Cancelled	•	
83.42	53.63	29.79		Cancelled	!	
42.71	32.77	9.94		Cancelled	!	
43.68	33.30	10.38		Cancelled		
82.79	49.00	33.79		Cancelled		
105.04	66.74	38.30		Cancelled	•	
66.65	36.23	30.42		Cancelled	!	
86.90	66.92	19.98		Cancelled	•	
63.97	33.02	30.95		Cancelled		
43.20	27.06			Cancelled		
75.81	51.15	24.66		Cancelled	•	
98.48	59.33	39.15		Cancelled		
80.00	54.40	25.60		Cancelled	•	
157.60	95.34	62.26		Cancelled	•	
102.17	75.16	27.01		Cancelled		
67.03	31.92	35.11		Cancelled	•	
109.40	58.73	50.67		Cancelled		
130.22	83.51	46.71	1214.46	Cancelled	1214.46	
103.29	65.96	37.33	895.92	Cancelled	895.92	
67.76	53.90	13.86	318.78	Cancelled	318.78	
130.87	93.89	36.98	1220.34	Cancelled	1220.34	
114.84	56.76	58.08	2148.96	Cancelled	2148.96	
145.63	77.90	67.73	2709.20	Cancelled	2709.20	
139.87	62.16	77.71	2409.01	Cancelled	2409.01	
34.74	16.24	18.50	740.00	Cancelled	740.00	
50.82	38.58	12.24	293.76	Cancelled	293.76	
115.15	98.30	16.85	657.15	Cancelled	657.15	
180.79	95.59	85.20	3919.20	Cancelled	3919.20	
140.50	89.14	51.36	1540.80	Cancelled	1540.80	
169.56	83.05	86.51	3806.44	Cancelled	3806.44	
121.57	68.30	53.27	1704.64	Cancelled	1704.64	
92.77	67.56	25.21	731.09	Cancelled	731.09	
137.88	91.92	45.96	1057.08	Cancelled	1057.08	
117.10	69.78	47.32	1088.36	Cancelled	1088.36	
55.30	26.72	28.58	771.66	Cancelled	771.66	
56.24	37.49	18.75	393.75	Cancelled	393.75	
80.55	43.30	37.25	1229.25	Cancelled	1229.25	
rows in se	et (0.002 se	:c)			+	١

17. Tampilkan tanggal order, nama produk (huruf kapital), quantityorder, price each, total (quantity \* price) untuk produk berjenis classic cars yang diorder selama januari - juni 2003, yang ordernya antara 50-100. Tampilkan 10 data saja untuk total harga tertinggi dan total ditampilkan pembulatan dengan 2 angka dibelakang koma

```
MariaDB [classicmodels]> SELECT UPPER(productName) AS 'ProductName', orderDate, quantityOrdered,
-> priceEach, FORMAT(quantityOrdered*priceEach,2) AS 'Total', productLine
     -> FROM orders JOIN orderDetails USING(orderNumber)
    -> JOIN products USING(productCode)
-> WHERE orderDate BETWEEN '20030101' AND '20030630'
    -> AND quantityOrdered BETWEEN '50' AND '100'
-> AND productLine = 'Classic Cars'
-> ORDER BY 'Total' DESC
     -> LIMIT 10;
 ProductName
                                     | orderDate | quantityOrdered | priceEach | Total
                                                                                                             | productLine
 1972 ALFA ROMEO GTA
                                     2003-02-11
                                                                                    127.84 | 6,392.00 | Classic Cars
                                                                          50 I
  1966 SHELBY COBRA 427 S/C | 2003-05-20
                                                                          50 İ
                                                                                      43.27 | 2,163.50 | Classic Cars
 rows in set (0.009 sec)
```

18. Tampilkan nama lengkap karyawan, nama customer yang dilayani, alamat yang diambil dari addressline2 (jika tidak ada addressline2 (nilainya NULL), ganti dengan addressline1, country dan creditlimit untuk pelanggan yang country nya USA dan kreditlimitnya antara 50000 dan 75000. Urutkan dari kreditlimit tertinggi



# E. REFERENSI

 $\underline{https://www.w3schools.com/sql/func\_sqlserver\_nullif.asp}$ 

http://staffnew.uny.ac.id/upload/132310817/pendidikan/PTI\_Modul09\_rev\_0.pdf