Rafif Tri Hartanto

SIB 2A

26

Jobsheet 3 PWL

Praktikum 1

1.

```
pwl_pos
```

2.

```
APP_NAME=Laravel
APP_ENV=local
APP_KEY=base64:Uo6+d1P5cjXo+s6ECvPg4LaNWL0RiH7o8D2yQG4wGGM=
APP_DEBUG=true
APP_URL=http://localhost
```

3.

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=PWL_POS
DB_USERNAME=root
DB_PASSWORD=
```

Praktikum 2.1

1.

```
PS F:\PWL2025\PWL_Week2\POS> php artisan make:migration create_m_level_table --create=m_level

INFO Migration [F:\PWL2025\PWL_Week2\POS\database\migrations/2025_03_04_062048_create_m_level_table.php] created successfully.
```

```
public function up(): void
{
    Schema::create('m_level', function (Blueprint $table) {
        $table->id('level_id');
        $table->string('level_kode', 10)->unique();
        $table->string('level_nama', 100);
        $table->timestamps();
    });
}
```

4.



5.

Praktikum 2.2

1.

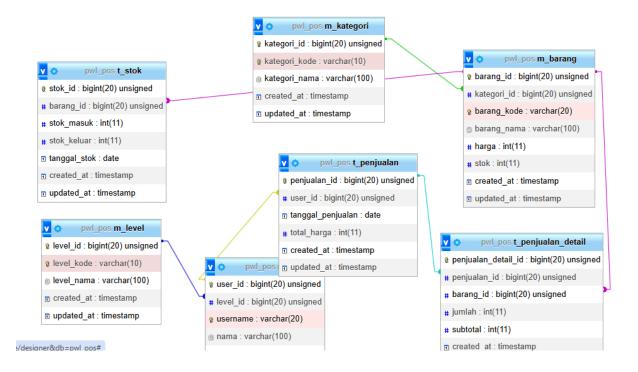
```
public function up(): void
{
    Schema::table('m_user', function (Blueprint $table) {
        $table->id('user_id');
        $table->unsignedBigInteger('level_id')->index(); //indexing untuk foreign key
        $table->string('username', 20)->unique();
        $table->string('nama', 100);
        $table->string('password');
        $table->timestamps();

        // mendefinisikan foreign key pada kolom level_id mengacu pada kolom level_id di tabel m_level
        $table->foreign('level_id')->references('level_id')->on('m_level');
});
}
```

2.

```
urn new class extends Migration {
   public function up(): void
       Schema::create('t_stok', function (Blueprint $table) {
            $table->id('stok_id'); // Primary Key
            $table->unsignedBigInteger('barang_id'); // Foreign Key ke m_barang
            $table->integer('stok_masuk')->default(0);
$table->integer('stok_keluar')->default(0);
            $table->date('tanggal_stok');
            $table->timestamps();
            $table->foreign('barang_id')->references('barang_id')->on('m_barang')->onDelete('cascade');
eturn new class extends Migration {
  public function up(): void
       Schema::create('t_penjualan_detail', function (Blueprint $table) {
           $table->id('penjualan_detail_id'); // Primary Key
           $table->unsignedBigInteger('penjualan_id'); // Foreign Key ke t_penjualan
$table->unsignedBigInteger('barang_id'); // Foreign Key ke m_barang
           $table->integer('jumlah');
           $table->integer('subtotal');
           $table->timestamps();
           $table->foreign('penjualan_id')->references('penjualan_id')->on('t_penjualan')->onDelete('cascade');
           $table->foreign('barang_id')->references('barang_id')->on('m_barang')->onDelete('cascade');
```

4



Praktikum 3

1.

2.

← T →	▼ level_id	level_kode	level_nama	created_at	updated_at
☐ Ø Ubah ♣ Salin ⊜ H	Hapus 1	ADM	Administrator	NULL	NULL
☐ Ø Ubah ♣ Salin ⊜ H	Hapus 2	MNG	Manager	NULL	NULL
☐ / Ubah 3 Salin ⊜ H	Hapus 3	STF	Staff/Kasir	NULL	NULL

```
class UserSeeder extends Seeder
    public function run(): void
        $data = [
                'user id' => 1,
                'level id' => 1,
                'username' => 'admin',
                'nama' => 'Administrator',
                'password' => Hash::make('12345'), // Hash password
                'user id' => 2,
                'level_id' => 2,
                'username' => 'manager',
                'nama' => 'Manager',
                'password' => Hash::make('12345'),
                'user id' => 3,
                'level_id' => 3,
                'username' => 'staff',
                'nama' => 'Staff/Kasir',
                'password' => Hash::make('12345'),
            ],
        ];
        DB::table('m_user')->insert($data);
```



```
namespace Database\Seeders;
 use Illuminate\Database\Seeder;
 use Illuminate\Support\Facades\DB;
 class KategoriSeeder extends Seeder
         public function run(): void
                 $data = [
                         ['kategori_id' => 1, 'kategori_kode' => 'FB', 'kategori_nama' => 'Food & Beverage'],
                         ['kategori_id' => 2, 'kategori_kode' => 'BH', 'kategori_nama' => 'Beauty & Health'],
['kategori_id' => 3, 'kategori_kode' => 'HC', 'kategori_nama' => 'Home Care'],
['kategori_id' => 4, 'kategori_kode' => 'BK', 'kategori_nama' => 'Baby & Kid'],
['kategori_id' => 5, 'kategori_kode' => 'EL', 'kategori_nama' => 'Electronics'],
                 DB::table('m kategori')->insert($data);
←T→
                                                        ▼ kategori_id kategori_kode kategori_nama created_at updated_at
1 FB
                                                                                                                     Food & Beverage NULL
                                                                                                                                                                            NULL
2 BH
                                                                                                                     Beauty & Health
                                                                                                                                                   NULL
                                                                                                                                                                            NULL
        3 HC
                                                                                                                     Home Care
                                                                                                                                                    NULL
                                                                                                                                                                            NULL
        NULL
                                                                                                                                                                            NULL
                                                                                  4 BK
                                                                                                                     Baby & Kid
                                                                                                                                                                            NULL
5 EL
                                                                                                                     Electronics
                                                                                                                                                    NULL
namespace Database\Seeders;
use Illuminate\Database\Seeder;
use Illuminate\Support\Facades\DB;
class BarangSeeder extends Seeder
       public function run(): void
              $data = [
                    ['barang_id' => 1, 'kategori_id' => 1, 'barang_kode' => 'B001', 'barang_nama' => 'Nasi Goreng', 'harga'
['barang_id' => 2, 'kategori_id' => 1, 'barang_kode' => 'B002', 'barang_nama' => 'Mie Ayam', 'harga' =>
['barang_id' => 3, 'kategori_id' => 1, 'barang_kode' => 'B003', 'barang_nama' => 'Teh Botol', 'harga' =>
['barang_id' => 4, 'kategori_id' => 2, 'barang_kode' => 'B004', 'barang_nama' => 'Sabun Mandi', 'harga'
['barang_id' => 5, 'kategori_id' => 2, 'barang_kode' => 'B005', 'barang_nama' => 'Sabun Mandi', 'harga'
                     ['barang_id' => 5, 'kategori_id' => 2, barang_kode' => B005', 'barang_nama' => 'Detergen', 'harga' => ['barang_id' => 6, 'kategori_id' => 3, 'barang_kode' => 'B006', 'barang_nama' => 'Detergen', 'harga' => ['barang_id' => 7, 'kategori_id' => 3, 'barang_kode' => 'B007', 'barang_nama' => 'Pewangi Ruangan', 'har ['barang_id' => 8, 'kategori_id' => 4, 'barang_kode' => 'B008', 'barang_nama' => 'Susu Formula', 'harga' ['barang_id' => 9, 'kategori_id' => 4, 'barang_kode' => 'B009', 'barang_nama' => 'Pampers', 'harga' => ['barang_id' => 10, 'kategori_id' => 5, 'barang_kode' => 'B010', 'barang_nama' => 'Headset', 'harga' =>
              DB::table('m_barang')->insert($data);
```

```
▼ barang_id kategori_id barang_kode barang_nama
                                                                                                  harga stok created_at updated_at
\leftarrow T \rightarrow
      🥜 Ubah 🛂 Salin 	 Hapus
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                                                             1 B001
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                                                                               Nasi Goreng
                                                                                                   20000
                                                             1 B002
                                                                                                               0 NULL
                                                                                                                               NULL

    Ø Ubah 
    ¾i Salin 
    │ Hapus

                                                                               Mie Ayam
                                                                                                   18000
                                                             1 B003
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      🥒 Ubah 👫 Salin 🌘 Hapus
                                               3
                                                                                Teh Botol
                                                                                                    5000
                                                                                                                               NULL
                                                             2 B004
                                                                                                               0 NULL
      🧷 Ubah 👫 Salin 🄘 Hapus
                                                                               Shampoo
                                                                                                   25000
                                               5
                                                             2 B005
                                                                                                   10000
                                                                                                               0 NULL
                                                                                                                               NULL
      🥒 Ubah 🛂 Salin 🧅 Hapus
                                                                               Sabun Mandi
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                                                             3 B006
                                                                                                               0 NULL
      🧷 Ubah 👫 Salin 🥥 Hapus
                                               6
                                                                               Detergen
                                                                                                    15000
                                                             3 B007
                                                                                                               0 NULL
                                                                                                                               NULL
      🥒 Ubah 🛂 Salin 🄘 Hapus
                                               7
                                                                               Pewangi Ruangan
                                                                                                   18000
                                                                                                                               NULL
                                                             4 B008
                                                                                                               0 NULL

    Ø Ubah 
    ¾
    å Salin 
    ⑤ Hapus

                                               8
                                                                               Susu Formula
                                                                                                   50000
                                               9
                                                             4 B009
                                                                                                   55000
                                                                                                               0 NULL
                                                                                                                               NULL

    Ø Ubah 
    ¾i Salin 
    ⊜ Hapus

                                                                               Pampers
                                                                                                                               NULL
                                                             5 B010
                                                                                                               0 NULL

    Ø Ubah 
    ¾ Salin 
    │ Hapus

                                             10
                                                                               Headset
                                                                                                   75000
namespace Database\Seeders;
use Illuminate\Database\Seeder;
use Illuminate\Support\Facades\DB;
use Carbon\Carbon;
class StokSeeder extends Seeder
     public function run(): void
          $data = [
               ['barang_id' => 1, 'stok_masuk' => 30, 'stok_keluar' => 5, 'tanggal_stok' => Carbon::now()],
               ['barang_id' => 2, 'stok_masuk' => 56, 'stok_keluar' => 10, 'tanggal_stok' => Carbon::now()],
['barang_id' => 3, 'stok_masuk' => 64, 'stok_keluar' => 8, 'tanggal_stok' => Carbon::now()],
['barang_id' => 4, 'stok_masuk' => 92, 'stok_keluar' => 15, 'tanggal_stok' => Carbon::now()],
                ['barang_id' => 5, 'stok_masuk' => 92, 'stok_keluar' => 12, 'tanggal_stok' => Carbon::now()],
                ['barang_id' => 6, 'stok_masuk' => 79, 'stok_keluar' => 20, 'tanggal_stok' => Carbon::now()],
                ['barang_id' => 7, 'stok_masuk' => 85, 'stok_keluar' => 18, 'tanggal_stok' => Carbon::now()],
               ['barang_id' => 8, 'stok_masuk' => 10, 'stok_keluar' => 2, 'tanggal_stok' => Carbon::now()],
['barang_id' => 9, 'stok_masuk' => 38, 'stok_keluar' => 5, 'tanggal_stok' => Carbon::now()],
['barang_id' => 10, 'stok_masuk' => 68, 'stok_keluar' => 7, 'tanggal_stok' => Carbon::now()],
          DB::table('t_stok')->insert($data);
\leftarrow T \rightarrow
                                   ▼ stok_id barang_id stok_masuk stok_keluar tanggal_stok
                                                                                                               created_at updated_at
                                                                                            5 2025-03-05

    Ø Ubah  
    ¾i Salin  
    ⊜ Hapus

                                                             1
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                                              2
                                                                                           10 2025-03-05
                                                                                                                NULL
      🧷 Ubah 👫 Salin 🧅 Hapus
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⊘ Ubah ¾i Salin 
⊚ Hapus

                                              3
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      🧷 Ubah 👫 Salin 🤘 Hapus
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                                              7
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                                                                                                               NULL
      🥜 Ubah 🛂 i Salin
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                           Hapus
      🥜 Ubah 👫 Salin 🥥 Hapus
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                                                                                            5 2025-03-05
      🧷 Ubah 👫 Salin
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                                                                                                                              NULL
                           Hapus
                                                           10
                                                                                            7 2025-03-05
                                                                                                                NULL
                                                                                                                              NULL
      🧷 Ubah 👫 Salin 🧅 Hapus
                                             10
                                                                           68
```

```
<?php
namespace Database\Seeders;
use Illuminate\Database\Seeder;
use Illuminate\Support\Facades\DB;
use Carbon\Carbon;
class PenjualanSeeder extends Seeder
   public function run(): void
       $data = [];
        for ($i = 1; $i <= 10; $i++) {
            $data[] = [
                'user_id' => rand(1, 3),
                'tanggal_penjualan' => Carbon::now()->subDays(rand(1, 30))->toDateString(),
                'total_harga' => rand(50000, 200000),
                'created_at' => Carbon::now(),
                'updated_at' => Carbon::now(),
            ];
       DB::table('t_penjualan')->insert($data);
```

ı	←Τ	→		\forall	penjualan_id	user_id	tanggal_penjualan	total_harga	created_at	updated_at
ı		<i></i> Ø Ubah	≩ alin	Hapus	1	3	2025-02-13	198617	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i> ❷</i> Ubah	≩ å Salin	Hapus	2	2	2025-02-12	54827	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	3-i Salin	Hapus	3	2	2025-02-15	97334	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	3 € Salin	Hapus	4	2	2025-02-11	161645	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	≩ i Salin	Hapus	5	1	2025-02-05	178713	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	≩ i Salin	Hapus	6	2	2025-02-04	163429	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	≩ € Salin	Hapus	7	1	2025-02-08	179855	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	≩ i Salin	Hapus	8	1	2025-02-21	126795	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	3-i Salin	Hapus	9	1	2025-02-06	115251	2025-03-05 03:29:47	2025-03-05 03:29:47
ı		<i>⊘</i> Ubah	≩ Salin	Hapus	10	2	2025-02-15	161904	2025-03-05 03:29:47	2025-03-05 03:29:47

```
class PenjualanDetailSeeder extends Seeder
     public function run(): void
          $data = [];
          for ($penjualan_id = 1; $penjualan_id <= 10; $penjualan_id++) {</pre>
                // Setiap transaksi memiliki 3 barang yang berbeda
                for (\$i = 0; \$i < 3; \$i++) {
                     $barang_id = rand(1, 10); // Barang ID acak dari 1-10
                     jumlah = rand(1, 5); // Jumlah barang acak (1-5)
                     $harga_satuan = rand(10000, 50000); // Harga per barang acak
                     $subtotal = $jumlah * $harga_satuan;
                     $data[] = [
                           'penjualan_id' => $penjualan_id,
                          'barang_id' => $barang_id,
                          'jumlah' => $jumlah,
                          'subtotal' => $subtotal,
                          'created_at' => Carbon::now(),
                          'updated at' => Carbon::now(),
                     ];
          // Masukkan 30 data ke dalam tabel t_penjualan_detail
          DB::table('t_penjualan_detail')->insert($data);
                     ▼ penjualan_detail_id penjualan_id barang_id jumlah subtotal created_at
\leftarrow T \rightarrow
                                                                                    updated_at
71388 2025-03-05 03:33:24 2025-03-05 03:33:24
☐ Ø Ubah ¾ Salin 	 Hapus
                                                                  29090 2025-03-05 03:33:24 2025-03-05 03:33:24
74490 2025-03-05 03:33:24 2025-03-05 03:33:24
                                    3
☐ Ø Ubah ♣ Salin ⊜ Hapus
                                                                  31224 2025-03-05 03:33:24 2025-03-05 03:33:24
                                                                 236855 2025-03-05 03:33:24 2025-03-05 03:33:24
☐ Ø Ubah ¾ Salin ⊜ Hapus
                                    5
                                               2
                                                              5
                                                                 125100 2025-03-05 03:33:24 2025-03-05 03:33:24
☐ Ø Ubah ¾ Salin 	 Hapus
                                    6
                                               2
                                                       6
                                                              5
                                                                  65956 2025-03-05 03:33:24 2025-03-05 03:33:24

  ☐ 
  Ø Ubah 
  Salin 
  ☐ Hapus

                                    7
                                               3
                                                       7
☐ Ø Ubah ¾ Salin ⊜ Hapus
                                                                  40405 2025-03-05 03:33:24 2025-03-05 03:33:24
                                    8
9
                                               3
                                                       10
                                                                 107892 2025-03-05 03:33:24 2025-03-05 03:33:24
                                                                 163785 2025-03-05 03:33:24 2025-03-05 03:33:24
☐ Ø Ubah ¾ Salin 	 Hapus
                                   10
☐ Ø Ubah ¾ Salin ⊜ Hapus
                                   11
                                               4
                                                       9
                                                                  43342 2025-03-05 03:33:24 2025-03-05 03:33:24
☐ Ø Ubah ♣ Salin ⊜ Hapus
                                   12
                                                       4
                                                                  41950 2025-03-05 03:33:24 2025-03-05 03:33:24
```

178060 2025-03-05 03:33:24 2025-03-05 03:33:24

89319 2025-03-05 03:33:24 2025-03-05 03:33:24

84750 2025-03-05 03:33:24 2025-03-05 03:33:24

4 189172 2025-03-05 03:33:24 2025-03-05 03:33:24

☐
 Ø Ubah
 Salin
 ☐ Hapus

☐ Ø Ubah ¾ Salin Hapus

■ Konsol bah 🛂 Salin 🦲 Hapus

13

14

15

5

5

5

10

3

Praktikum 4

1.

2.

Insert data baru berhasil

3.

$\leftarrow \top$	\rightarrow		~	level_id	level_kode	level_nama	created_at	updated_at
	<i>⊘</i> Ubah	≩-i Salin	Hapus	1	ADM	Administrator	NULL	NULL
	🥜 Ubah	≩-i Salin	Hapus	2	MNG	Manager	NULL	NULL
	🥒 Ubah	3 -i Salin	Hapus	3	STF	Staff/Kasir	NULL	NULL
	<i>y</i> Ubah	≩ € Salin	Hapus	4	CUS	Pelanggan	2025-03-05 05:14:30	2025-03-05 05:14:30

4.

Update data berhasil. Jumlah data yang di update: 1 baris

5.

Delete data berhasil. Jumlah data yang dihapus: 1 baris

6.

Data Level Pengguna

ID	Kode Level	Nama Level
1	ADM	Administrator
2	MNG	Manager
3	STF	Staff/Kasir

Praktikum 5

1.

2.

Insert data baru berhasil

←T			∇	kategori_id	kategori_kode	kategori_nama	created_at	updated_at
	<i>⊘</i> Ubah	≩-i Salin	Hapus	1	FB	Food & Beverage	NULL	NULL
	<i>⊘</i> Ubah	≩-i Salin	Hapus	2	ВН	Beauty & Health	NULL	NULL
	<i>⊘</i> Ubah	3-i Salin	Hapus	3	HC	Home Care	NULL	NULL
	<i>⊘</i> Ubah	3-i Salin	Hapus	4	ВК	Baby & Kid	NULL	NULL
	<i>⊘</i> Ubah	3-i Salin	Hapus	5	EL	Electronics	NULL	NULL
	<i>⊘</i> Ubah	≩≟ Salin	Hapus	6	SNK	Snack/Makanan Ringan	2025-03-05 05:46:57	NULL

Update data berhasil. Jumlah data yang diupdate: 1 baris

←T→	▼ kategori_id	kategori_kode	kategori_nama	created_at	updated_at
☐ Ø Ubah 3 i Salin	Hapus	1 FB	Food & Beverage	NULL	NULL
☐ Ø Ubah 3 i Salin	Hapus	2 BH	Beauty & Health	NULL	NULL
☐ 🖉 Ubah 🛂 i Salin	Hapus	3 HC	Home Care	NULL	NULL
☐ 🖉 Ubah 🛂 i Salin	Hapus	4 BK	Baby & Kid	NULL	NULL
☐ 🖉 Ubah 🛂 i Salin	Hapus	5 EL	Electronics	NULL	NULL
☐ 🖉 Ubah 🛂 Salin	Hapus	6 SNK	Camilan	2025-03-05 05:46:57	NULL

4.

Delete data berhasil. Jumlah data yang dihapus: 1 baris

Data Kategori Barang

ID	Kode Kategori	Nama Kategori
1	FB	Food & Beverage
2	ВН	Beauty & Health
3	HC	Home Care
4	BK	Baby & Kid
5	EL	Electronics

Praktikum 6

1.

```
PS F:\PWL2025\PWL_Week3\PWL_POS> php artisan make:model UserModel

INFO Model [F:\PWL2025\PWL_Week3\PWL_POS\app\Models\UserModel.php] created successfully.

Models

User.php

UserModel.php
```

```
namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class UserModel extends Model
{
    use HasFactory;
    protected $table = 'm_user'; //menedefinisikan nama tabel yang digunakan oleh model ini    protected $primarykey = 'user_id'; //menedefinisikan primary key dari tabel yang digunakan }
}
```

```
namespace App\Http\Controllers;

use App\Models\UserModel;
use Illuminate\Http\Request;

class UserController extends Controller
{
    public function index(){}

        //coba akses model usermodel
        $user = UserModel::all(); // ambil semua data dari tabel m_user
        return view('user', ['data'=> $user]);
}
```

```
<!DOCTYPE html>
    <title>Data Usea</title>
    <h1>Data User</h1>
     ID
         Username
         ID Level Pengguna
       @foreach ($data as $d)
         {{$d-> user_id}}
         {{$d-> username}}
         {{$d-> nama}}
         {{$d-> level_id}}
       @endforeach
     </body>
```

8.

Data User

ID	Username	ID Level Pengguna	
1	admin	Administrator	1
2	manager	Manager	2
3	staff	Staff/Kasir	3
6	customer-1	Pelanggan Pertama	3

Penutup

- 1. Laravel tidak dapat berjalan dengan benar jika APP_KEY tidak diatur
- 2. php artisan key:generate
- 3. Secara default, Laravel memiliki tiga file migrasi, yaitu: create_users_table.php: Membuat tabel users create_password_resets_table.php: Membuat tabel password_resets (untuk reset password)

- create_failed_jobs_table.php : Membuat tabel failed_jobs (untuk mencatat job yang gagal)
- 4. Tujuannya untuk mencatat waktu setiap perubahan data secara otomatis
- 5. Menghasilkan

Tipe data: BIGINT (20) UNSIGNED

Auto Increment: Ya Primary Key: Ya

- 6. \$table->id(); Membuat kolom **id** sebagai primary key, sedangkan \$table->id('level_id'); Membuat kolom **level_id** sebagai primary key
- 7. ->unique() digunakan untuk memastikan bahwa nilai dalam kolom tersebut tidak boleh duplikat.
- 8. \$table->id('level_id'); pada m_level: Primary key otomatis dengan tipe BIGINT UNSIGNED.
 \$table->unsignedBigInteger('level_id'); pada m_user: Foreign key yang merujuk ke level_id pada m_level.
 Karena foreign key harus cocok dengan tipe data primary keynya, maka level_id di m_user harus unsignedBigInteger.
- 9. Class Hash digunakan untuk mengamankan password dengan hashing.
 - Kode Hash::make('1234'); akan menghasilkan hash dari password 1234, sehingga tidak bisa dibaca langsung di database.
- 10. Tanda? adalah parameter binding, yang digunakan untuk mencegah SQL Injection.
- 11. protected \$table = 'm_user'; Memberi tahu Eloquent bahwa model ini terhubung ke tabel m_user, bukan users (default Laravel).
 - protected \$primaryKey = 'user_id'; Menentukan bahwa primary key dari tabel ini adalah user_id, bukan id (default Laravel).
- 12. Eloquent ORM karena paling mudah dibaca dan digunakan Otomatis mengelola model dan relasi. Lebih aman dari SQL Injection