

### **JOBSHEET 10: RESTFUL API**

Mata Kuliah Pemrograman Web Lanjut

Maret 2025

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#### **LEMBAR JAWABAN JOBSHEET**

Praktikum 1 – Membuat RESTful API Register

Install JWT

```
composer require tymon/jwt-auth:2.1.1
```

Publish konfigurasi

```
php artisan vendor:publish --provider="Tymon\JWTAuth\Providers\LaravelServiceProvider"
```

Buat key untuk JWT

```
php artisan jwt:secret
```

```
auth.php

'guards' => [

    'web' => [

    'driver' => 'session',
    'provider' => 'users',
    ],
    'api' => [

    'driver' => 'jwt',
    'provider' => 'users',
    ]
],
```



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#### Penambahkan kode di UserModul

```
UserModel.php
  use Tymon\JWTAuth\Contracts\JWTSubject;

class UserModel extends Authenticatable implements JWTSubject
  {
    no usages
    public function getJWTIdentifier()
    {
        return $this->getKey();
    }

    no usages
    public function getJWTCustomClaims()
    {
        return [];
    }
}
```

Buat controller untuk Api

php artisan make:controller Api/RegisterController



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```
RegisterController.php
 <?php
 namespace App\Http\Controllers\Api;
 use App\Http\Controllers\Controller;
 use App\Models\UserModel;
 use Illuminate\Http\Request;
 use Illuminate\Support\Facades\Validator;
 class RegisterController extends Controller
     public function __invoke(Request $request)
         $validator = Validator::make($request->all(), [
             'username' => 'required',
             'nama' => 'required',
             'level_id' => 'required'
         1);
         if ($validator->fails()) {
             return response()->json($validator->errors(), status: 422);
         $user = UserModel::create([
             'username' => $request->username,
             'password' => bcrypt($request->password),
             'level_id' => $request->level_id
         1);
         if ($user) {
             return response()->json([
                 'success' => true,
             ], status: 201);
         return response()->json([
```



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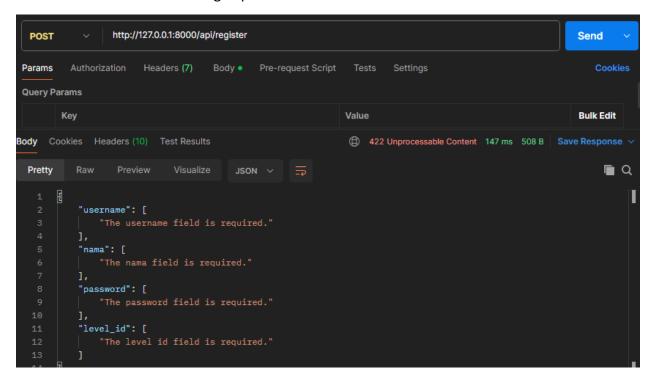
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#### Tambahkan kode untuk api resister

```
api.php
Route::post( uri: '/register', action: \App\Http\Controllers\Api\RegisterController::class)->name( name: 'register');
```

#### Jalankan Laravel dan buka dengan postman

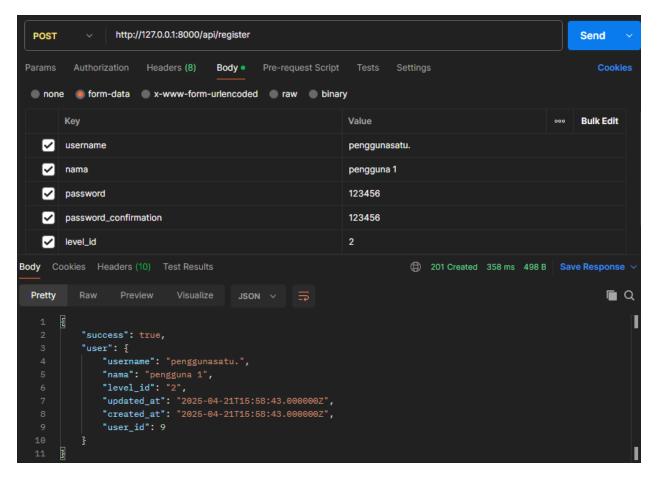


Tambahkan body dan pesan akan sukses



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Praktikum 2 – Membuat RESTful API Login

Buat controller untuk api controller

php artisan make:controller Api/LoginController

Isi dengan



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```
LoginController.php
 <?php
 namespace App\Http\Controllers\Api;
 use App\Http\Controllers\Controller;
 use Illuminate\Http\Request;
 use Illuminate\Support\Facades\Validator;
 class LoginController extends Controller
     public function __invoke(Request $request)
         $validator = Validator::make($request->all(), [
             'username' => 'required',
             'password' => 'required',
         ]);
         if ($validator->fails()) {
             return response()->json($validator->errors(), status: 422);
         $credentials = $request->only( keys: 'username', 'password');
         if (!$token = auth()->guard( name: 'api')->attempt($credentials)) {
             return response()->json([
                 'success' => false,
                 'message' => 'Username or password is incorrect',
             ], status: 401);
         return response()->json([
             'success' => true,
             'token' => $token,
             'user' => auth()->guard( name: 'api')->user(),
         ], status: 200);
```



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### Tambahkan route unutk api login

```
api.php
Route::post( uri: '/login', action: \App\Http\Controllers\Api\LoginController::class)->name( name: 'login');
```

Uji coba tan

### pa body

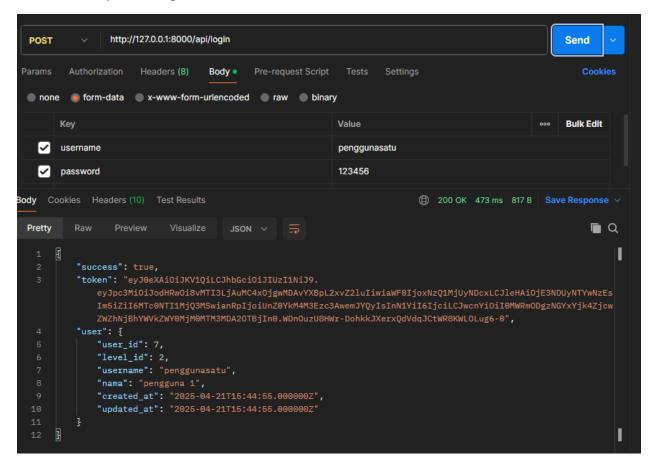


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### Masukan body untuk login



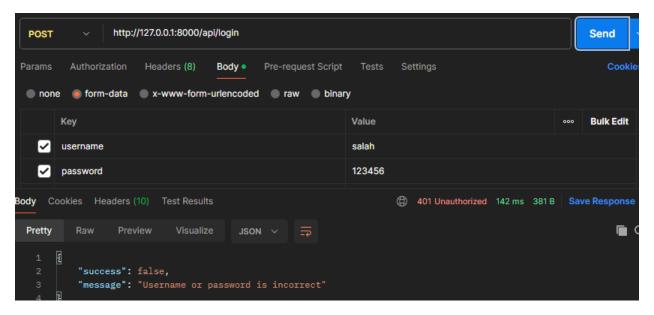


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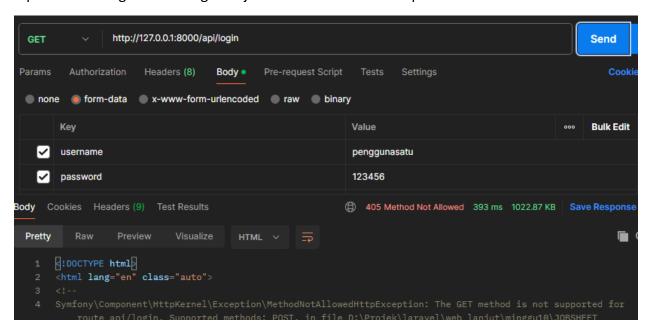
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#### Uji coba salah



Input benar dengan method get terjadi masalah method di diperbolehkan





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Praktikum 3 – Membuat RESTful API Logout

Menambahkan kode di .env

.env
JWT\_SHOW\_BLACKLIST\_EXCEPTION=true

Buat controller untuk api logout

php artisan make:controller Api/LogoutController



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```
LogoutController.php
 <?php
 namespace App\Http\Controllers\Api;
 use App\Http\Controllers\Controller;
 use Illuminate\Http\Request;
 use Tymon\JWTAuth\Facades\JWTAuth;
 class LogoutController extends Controller
 {
     public function __invoke(Request $request)
         $remoteToken = JWTAuth::invalidate(JWTAuth::getToken());
         if ($remoteToken) {
             return response()->json([
                 'success' => true,
                 'message' => 'Logout successful',
             ]);
```



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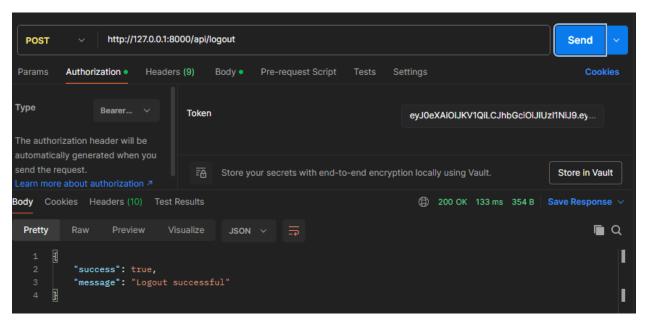
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### Tambahkan route untuk api logout

```
api.php
Route::post( uri: '/logout', action: \App\Http\Controllers\Api\LogoutController::class)->name( name: 'logout');
```

### Salin token dari output login tambahkan ke token logout





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Praktikum 4 – Implementasi CRUD dalam RESTful API

Membuat controller untuk api level

php artisan make:controller Api/LevelController



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```
LevelController.php
 <?php
 namespace App\Http\Controllers\Api;
 use App\Http\Controllers\Controller;
 use App\Models\LevelModel;
 use Illuminate\Http\Request;
 class LevelController extends Controller
     public function index()
         return LevelModel::all();
     public function store(Request $request)
         $level = LevelModel::create($request->all());
         return response()->json($level, status: 201);
     public function show(LevelModel $level)
         return LevelModel::find($level);
     public function update(Request $request, LevelModel $level)
         $level->update($request->all());
         return LevelModel::find($level);
     public function destroy(LevelModel $user)
         $user->delete();
         return response()->json([
         1);
```



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### Tambahkan route untuk api crud level

```
api.php
Route::get( uri: '/levels', [\App\Http\Controllers\Api\LevelController::class, 'index']);
Route::post( uri: '/levels', [\App\Http\Controllers\Api\LevelController::class, 'store']);
Route::get( uri: '/levels/{level}', [\App\Http\Controllers\Api\LevelController::class, 'show']);
Route::put( uri: '/levels/{level}', [\App\Http\Controllers\Api\LevelController::class, 'update']);
Route::delete( uri: '/levels/{level}', [\App\Http\Controllers\Api\LevelController::class, 'destroy']);
```

#### Get http://127.0.0.1:8000/api/levels

```
http://127.0.0.1:8000/api/levels
                                                                                                               Send
  GET
          Authorization • Headers (9)
                                                 Pre-request Script
                                                                            Settings
                                                                                                                   Cookies
Body Cookies Headers (10) Test Results
                                                                                (f) 200 OK 225 ms 1.63 KB Save Response >
  Pretty
                                                                                                                    ■ Q
           Raw
                   Preview
                               Visualize
                "level_id": 1,
                "level_kode": "ADM",
                "level_nama": "Administrator",
                "created_at": null,
                "updated_at": null
                "level_id": 2,
                "level_kode": "MNG",
                "level_nama": "Manager",
                "created_at": null,
                "updated_at": null
```

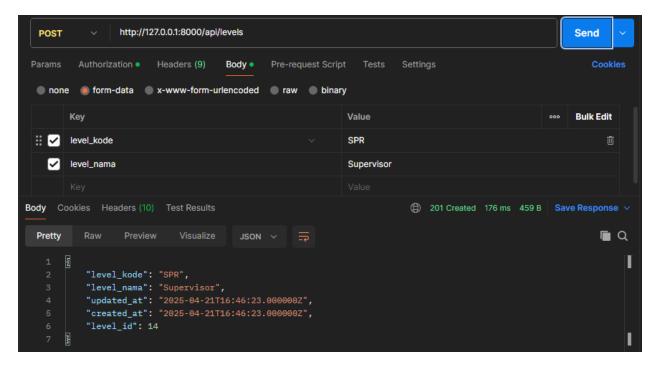
Post http://127.0.0.1:8000/api/levels



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#### Get http://127.0.0.1:8000/api/levels/{level}

```
http://127.0.0.1:8000/api/levels/1
  GET
                                                                                                            Send
                                       Body •
                                                Pre-request Script
                                                                                                               Cookies
  none form-data x-www-form-urlencoded raw binary
                                                               Value
        Key
                                                                                                            Bulk Edit
Body Cookies Headers (10) Test Results
                                                                               (f) 200 OK 167 ms 408 B Save Response V
  Pretty
                                                                                                                 ■ Q
                "level_id": 1,
                "level_kode": "ADM",
                "level_nama": "Administrator",
                "created_at": null,
                "updated_at": null
```

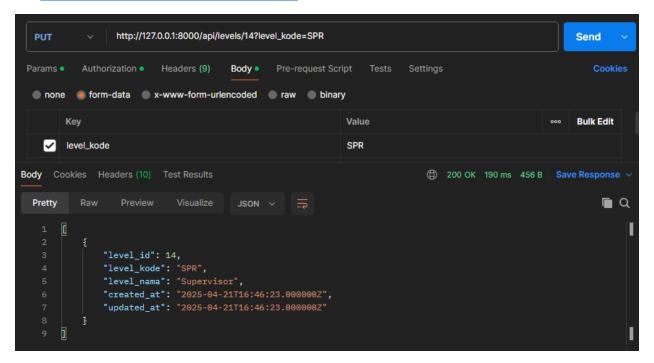


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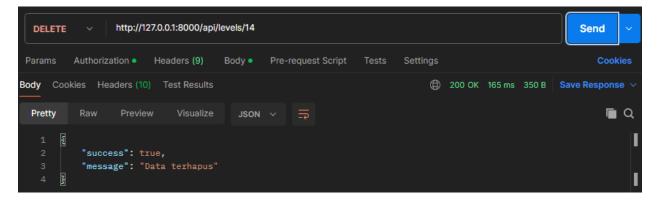
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### Put http://127.0.0.1:8000/api/levels/{level}



### Delete <a href="http://127.0.0.1:8000/api/levels/{level}">http://127.0.0.1:8000/api/levels/{level}</a>





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#### **TUGAS**

Implementasikan CRUD API pada tabel lainnya yaitu tabel m\_user, m\_kategori, dan m\_barang CRUD dari:

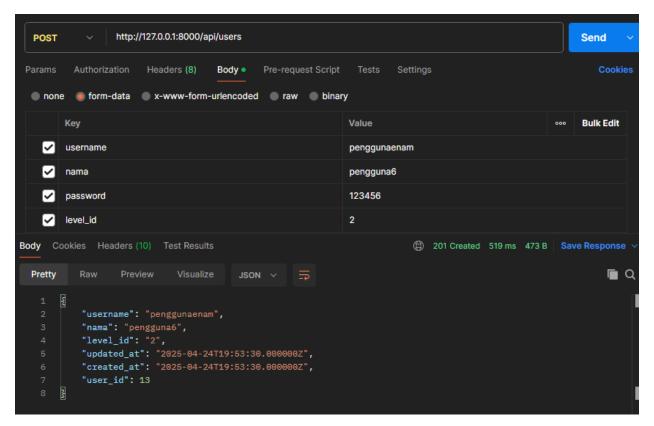
m\_user

```
GET
                   http://127.0.0.1:8000/api/users
                                                                                                                    Send
                                                                              Settings
Body Cookies Headers (10) Test Results
                                                                                   ( 200 OK 224 ms 1.84 KB Save Response
  Pretty
                                                                                                                         ■ Q
                 "user_id": 1,
                 "level_id": 1,
                 "username": "admin",
                 "nama": "Administrator",
                 "created_at": null,
                 "updated_at": null,
                 "image": ""
                 "user_id": 2,
                 "level_id": 2,
                 "username": "manager",
                 "nama": "Manager",
"created_at": null,
                 "updated_at": null,
                 "image": ""
```



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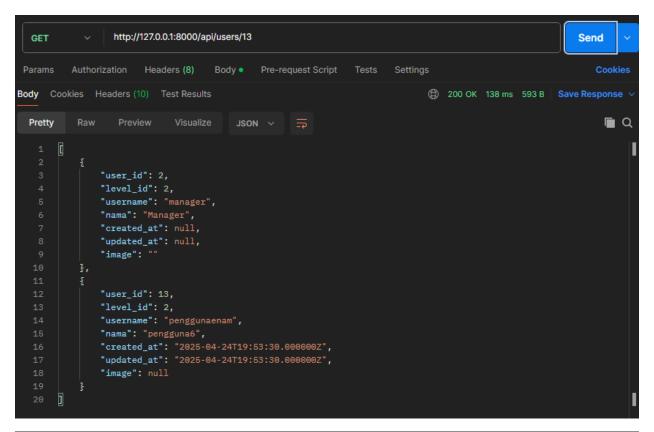
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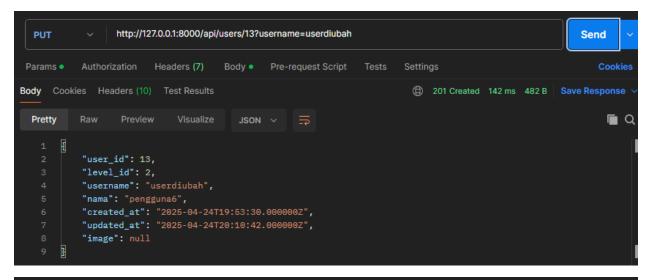


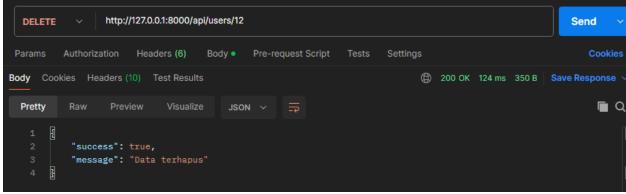
```
http://127.0.0.1:8000/api/users/13
  GET
                                                                                                                             Send
           Authorization Headers (8)
                                         Body • Pre-request Script
                                                                          Tests
                                                                                   Settings
                                                                                           ( 200 OK 144 ms 479 B Save Response >
Body Cookies Headers (10) Test Results
  Pretty
                                                                                                                                   ■ Q
             "level_id": 2,
             "username": "penggunaenam",
             "nama": "pengguna6",
             "created_at": "2025-04-24T19:53:30.000000Z",
"updated_at": "2025-04-24T19:53:30.0000000Z",
             "image": null
```



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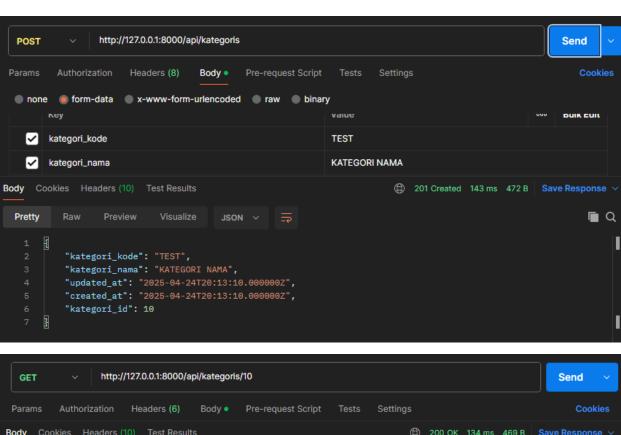
### m\_kategori

```
http://127.0.0.1:8000/api/kategoris
   GET
                                                                                                                                  Send
            Authorization Headers (6)
                                                                                       Settings
Body Cookies Headers (10) Test Results
                                                                                                                                        ■ Q
  Pretty
                   "kategori_id": 1,
                   "kategori_kode": "MKN",
"kategori_nama": "Makanan",
                   "created_at": null,
                   "updated_at": null
                   "kategori_id": 2,
                   "kategori_kode": "MNM",
"kategori_nama": "Minuman",
                   "created_at": null,
                   "updated_at": null
                   "kategori_id": 3,
                   "kategori_kode": "DRK",
"kategori_nama": "Dessert",
                   "created_at": null,
                   "updated_at": null
```



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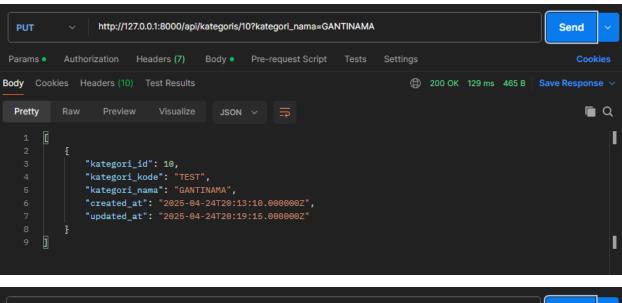
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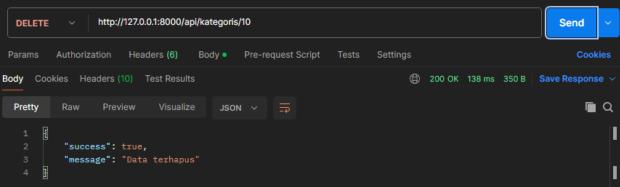




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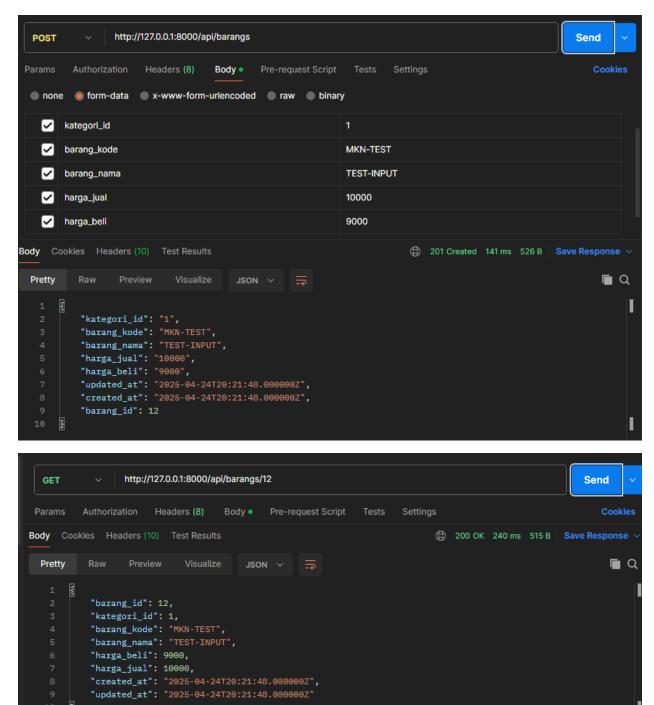
### m\_barang

```
http://127.0.0.1:8000/api/barangs
                                                                                                             Send
  GET
                                                                         Settings
 Params
          Authorization
                        Headers (6) Body •
                                               Pre-request Script
                                                                 Tests
Body Cookies Headers (10) Test Results
                                                                               (f) 200 OK 128 ms 2.01 KB Save Response >
                                                                                                                  ■ Q
  Pretty
                "barang_id": 1,
                "kategori_id": 1,
                "barang_kode": "MKN-001",
                "barang_nama": "Nasi Goreng",
                "harga_beli": 10000,
                "harga_jual": 15000,
               "created_at": null,
               "updated_at": null
                "barang_id": 2,
                "kategori_id": 2,
                "barang_kode": "MNM-002",
                "barang_nama": "ES Degan",
                "harga_beli": 8000,
                "harga_jual": 12000,
                "created_at": null,
                "updated_at": null
```



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