

# TUGAS 3

## WEB SERVICE DEVELOPMENT “PHP CRUD API”

PROGDI / JENJANG / KELAS

: SI / S1 / A2DLC

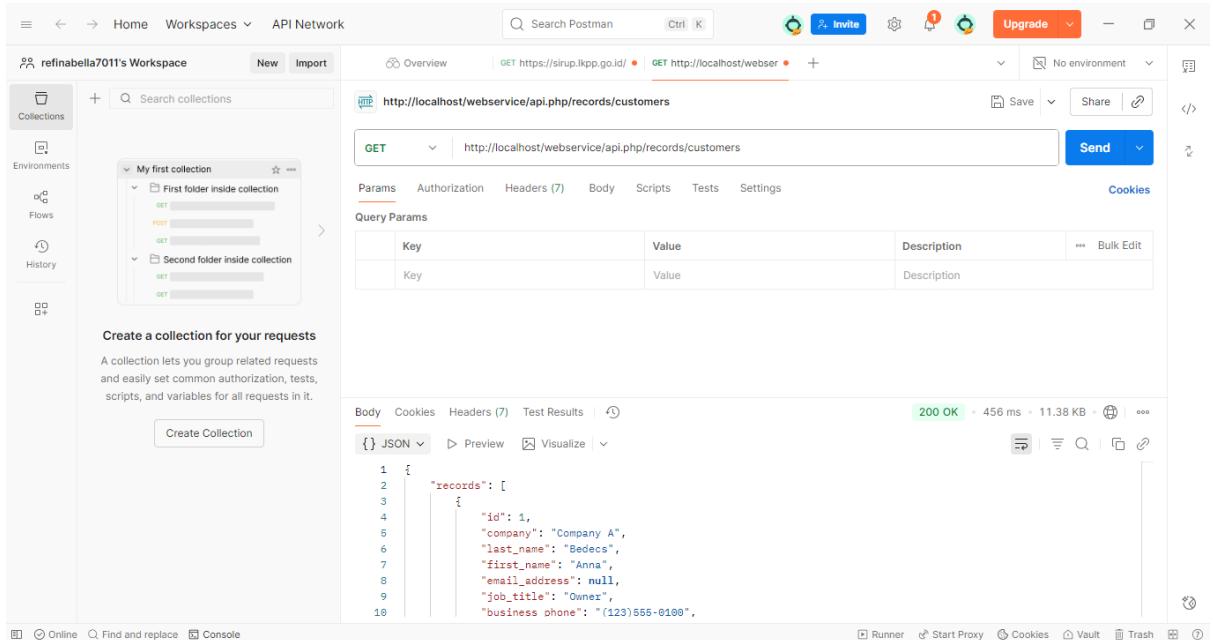
NAMA

: REFINA BELLA ALDILASA

NIM

: 23.01.55.7011

### 1. DATA CUSTOMER DARI APLIKASI POSTMAN



The screenshot shows the Postman interface with a collection named "refinabell7011's Workspace". Under "My first collection", there is a "First folder inside collection" containing three requests: GET, POST, and GET. Below it is a "Second folder inside collection" containing two requests: GET and GET. A "Create a collection for your requests" section is visible on the left. The main area shows a GET request to "http://localhost/webservice/api.php/records/customers". The response is a 200 OK status with a response time of 456 ms and a size of 11.38 KB. The response body is a JSON object with two records:

```
1  {
2      "records": [
3          {
4              "id": 1,
5              "company": "Company A",
6              "last_name": "Bedecs",
7              "first_name": "Anna",
8              "email_address": null,
9              "job_title": "Owner",
10             "business_phone": "(123)555-0100",
11             "home_phone": null,
12             "mobile_phone": null,
13             "fax_number": "(123)555-0101",
14             "address": "123 1st Street",
15             "city": "Seattle",
16             "state_province": "WA",
17             "zip_postal_code": "99999",
18             "country_region": "USA",
19             "web_page": null,
20             "notes": null,
21             "attachments": ""
22         },
23         {
24             "id": 2,
25             "company": "Company B",
26             "last_name": "Bedecs",
27             "first_name": "Anna",
28             "email_address": null,
29             "job_title": "Owner",
30             "business_phone": "(123)555-0100",
31             "home_phone": null,
32             "mobile_phone": null,
33             "fax_number": "(123)555-0101",
34             "address": "123 1st Street",
35             "city": "Seattle",
36             "state_province": "WA",
37             "zip_postal_code": "99999",
38             "country_region": "USA",
39             "web_page": null,
40             "notes": null,
41             "attachments": ""
42         }
43     ]
44 }
```

```
{
    "records": [
        {
            "id": 1,
            "company": "Company A",
            "last_name": "Bedecs",
            "first_name": "Anna",
            "email_address": null,
            "job_title": "Owner",
            "business_phone": "(123) 555-0100",
            "home_phone": null,
            "mobile_phone": null,
            "fax_number": "(123) 555-0101",
            "address": "123 1st Street",
            "city": "Seattle",
            "state_province": "WA",
            "zip_postal_code": "99999",
            "country_region": "USA",
            "web_page": null,
            "notes": null,
            "attachments": ""
        },
        {
            "id": 2,
            "company": "Company B",
            "last_name": "Bedecs",
            "first_name": "Anna",
            "email_address": null,
            "job_title": "Owner",
            "business_phone": "(123) 555-0100",
            "home_phone": null,
            "mobile_phone": null,
            "fax_number": "(123) 555-0101",
            "address": "123 1st Street",
            "city": "Seattle",
            "state_province": "WA",
            "zip_postal_code": "99999",
            "country_region": "USA",
            "web_page": null,
            "notes": null,
            "attachments": ""
        }
    ]
}
```

```
        "last_name": "Gratacos Solsona",
        "first_name": "Antonio",
        "email_address": null,
        "job_title": "Owner",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 2nd Street",
        "city": "Boston",
        "state_province": "MA",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
{
    "id": 3,
    "company": "Company C",
    "last_name": "Axen",
    "first_name": "Thomas",
    "email_address": null,
    "job_title": "Purchasing Representative",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "123 3rd Street",
    "city": "Los Angelas",
    "state_province": "CA",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 4,
    "company": "Company D",
    "last_name": "Lee",
    "first_name": "Christina",
    "email_address": null,
    "job_title": "Purchasing Manager",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "123 4th Street",
    "city": "New York",
    "state_province": "NY",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
```

```
        "notes": null,
        "attachments": ""

    },
    {
        "id": 5,
        "company": "Company E",
        "last_name": "O'Donnell",
        "first_name": "Martin",
        "email_address": null,
        "job_title": "Owner",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 5th Street",
        "city": "Minneapolis",
        "state_province": "MN",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 6,
        "company": "Company F",
        "last_name": "Pérez-Olaeta",
        "first_name": "Francisco",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 6th Street",
        "city": "Milwaukee",
        "state_province": "WI",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 7,
        "company": "Company G",
        "last_name": "Xie",
        "first_name": "Ming-Yang",
        "email_address": null,
        "job_title": "Owner",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
```

```
        "address": "123 7th Street",
        "city": "Boise",
        "state_province": "ID",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 8,
        "company": "Company H",
        "last_name": "Andersen",
        "first_name": "Elizabeth",
        "email_address": null,
        "job_title": "Purchasing Representative",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 8th Street",
        "city": "Portland",
        "state_province": "OR",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 9,
        "company": "Company I",
        "last_name": "Mortensen",
        "first_name": "Sven",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 9th Street",
        "city": "Salt Lake City",
        "state_province": "UT",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 10,
        "company": "Company J",
        "last_name": "Wacker",
        "first_name": "Roland",
        "email_address": null,
        "job_title": "Sales Representative",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 10th Street",
        "city": "Seattle",
        "state_province": "WA",
        "zip_postal_code": "98101",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    }
]
```

```
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 10th Street",
        "city": "Chicago",
        "state_province": "IL",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 11,
        "company": "Company K",
        "last_name": "Krschne",
        "first_name": "Peter",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 11th Street",
        "city": "Miami",
        "state_province": "FL",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 12,
        "company": "Company L",
        "last_name": "Edwards",
        "first_name": "John",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "123 12th Street",
        "city": "Las Vegas",
        "state_province": "NV",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    }
]
```

```
},
{
    "id": 13,
    "company": "Company M",
    "last_name": "Ludick",
    "first_name": "Andre",
    "email_address": null,
    "job_title": "Purchasing Representative",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "456 13th Street",
    "city": "Memphis",
    "state_province": "TN",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 14,
    "company": "Company N",
    "last_name": "Grilo",
    "first_name": "Carlos",
    "email_address": null,
    "job_title": "Purchasing Representative",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "456 14th Street",
    "city": "Denver",
    "state_province": "CO",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 15,
    "company": "Company O",
    "last_name": "Kupkova",
    "first_name": "Helena",
    "email_address": null,
    "job_title": "Purchasing Manager",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "456 15th Street",
    "city": "Honolulu",
```

```
        "state_province": "HI",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 16,
        "company": "Company P",
        "last_name": "Goldschmidt",
        "first_name": "Daniel",
        "email_address": null,
        "job_title": "Purchasing Representative",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "456 16th Street",
        "city": "San Francisco",
        "state_province": "CA",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 17,
        "company": "Company Q",
        "last_name": "Bagel",
        "first_name": "Jean Philippe",
        "email_address": null,
        "job_title": "Owner",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "456 17th Street",
        "city": "Seattle",
        "state_province": "WA",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 18,
        "company": "Company R",
        "last_name": "Autier Miconi",
        "first_name": "Catherine",
        "email_address": null,
        "job_title": "Purchasing Representative",
```

```
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "456 18th Street",
        "city": "Boston",
        "state_province": "MA",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
{
    "id": 19,
    "company": "Company S",
    "last_name": "Eggerer",
    "first_name": "Alexander",
    "email_address": null,
    "job_title": "Accounting Assistant",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "789 19th Street",
    "city": "Los Angelas",
    "state_province": "CA",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 20,
    "company": "Company T",
    "last_name": "Li",
    "first_name": "George",
    "email_address": null,
    "job_title": "Purchasing Manager",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "789 20th Street",
    "city": "New York",
    "state_province": "NY",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
```

```
        "id": 21,
        "company": "Company U",
        "last_name": "Tham",
        "first_name": "Bernard",
        "email_address": null,
        "job_title": "Accounting Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "789 21th Street",
        "city": "Minneapolis",
        "state_province": "MN",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 22,
        "company": "Company V",
        "last_name": "Ramos",
        "first_name": "Luciana",
        "email_address": null,
        "job_title": "Purchasing Assistant",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "789 22th Street",
        "city": "Milwaukee",
        "state_province": "WI",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""

    },
    {
        "id": 23,
        "company": "Company W",
        "last_name": "Entin",
        "first_name": "Michael",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "789 23th Street",
        "city": "Portland",
        "state_province": "OR",
        "zip_postal_code": "99999",
```

```
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
{
    "id": 24,
    "company": "Company X",
    "last_name": "Hasselberg",
    "first_name": "Jonas",
    "email_address": null,
    "job_title": "Owner",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "789 24th Street",
    "city": "Salt Lake City",
    "state_province": "UT",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 25,
    "company": "Company Y",
    "last_name": "Rodman",
    "first_name": "John",
    "email_address": null,
    "job_title": "Purchasing Manager",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
    "mobile_phone": null,
    "fax_number": "(123) 555-0101",
    "address": "789 25th Street",
    "city": "Chicago",
    "state_province": "IL",
    "zip_postal_code": "99999",
    "country_region": "USA",
    "web_page": null,
    "notes": null,
    "attachments": ""
},
{
    "id": 26,
    "company": "Company Z",
    "last_name": "Liu",
    "first_name": "Run",
    "email_address": null,
    "job_title": "Accounting Assistant",
    "business_phone": "(123) 555-0100",
    "home_phone": null,
```

```
        "mobile_phone": null,
        "fax_number": "(123)555-0101",
        "address": "789 26th Street",
        "city": "Miami",
        "state_province": "FL",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
    {
        "id": 27,
        "company": "Company AA",
        "last_name": "Toh",
        "first_name": "Karen",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123)555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123)555-0101",
        "address": "789 27th Street",
        "city": "Las Vegas",
        "state_province": "NV",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
    {
        "id": 28,
        "company": "Company BB",
        "last_name": "Raghav",
        "first_name": "Amritansh",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123)555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123)555-0101",
        "address": "789 28th Street",
        "city": "Memphis",
        "state_province": "TN",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    },
    {
        "id": 29,
        "company": "Company CC",
```

```

        "last_name": "Lee",
        "first_name": "Soo Jung",
        "email_address": null,
        "job_title": "Purchasing Manager",
        "business_phone": "(123) 555-0100",
        "home_phone": null,
        "mobile_phone": null,
        "fax_number": "(123) 555-0101",
        "address": "789 29th Street",
        "city": "Denver",
        "state_province": "CO",
        "zip_postal_code": "99999",
        "country_region": "USA",
        "web_page": null,
        "notes": null,
        "attachments": ""
    }
]
}

```

## 2. REQUEST API

<http://localhost/webservice/api.php/records/orders>

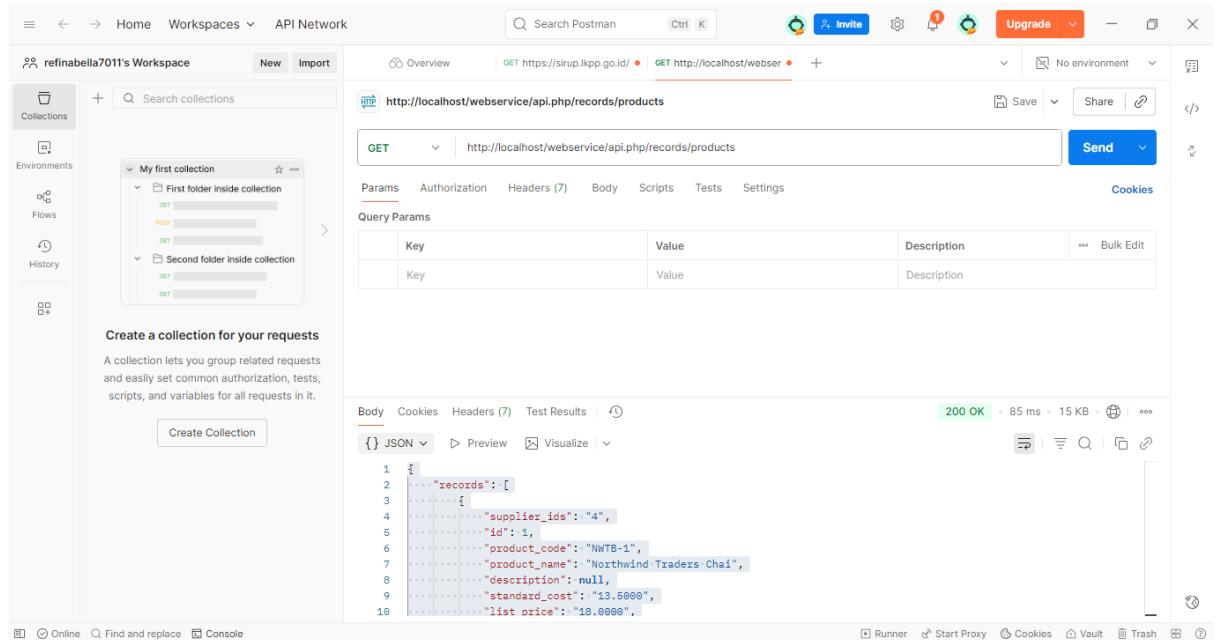
The screenshot shows the Postman interface with a collection named 'My first collection' containing several requests. A specific GET request to 'http://localhost/webservice/api.php/records/orders' is selected. The response body is displayed as JSON:

```

1  {
2     "records": [
3         {
4             "id": 38,
5             "employee_id": 9,
6             "customer_id": 27,
7             "order_date": "2006-01-15 00:00:00",
8             "shipped_date": "2006-01-22 00:00:00",
9             "shipper_id": 2,
10            "ship_name": "Karen Toh"
11        }
12    ]
13 }

```

<http://localhost/webservice/api.php/records/products>



The screenshot shows the Postman interface with a collection named "My first collection". Inside this collection, there is a folder "First folder inside collection" containing three requests: GET, POST, and PUT. Another folder "Second folder inside collection" contains two requests: GET and PUT. A "Create a collection for your requests" section is visible.

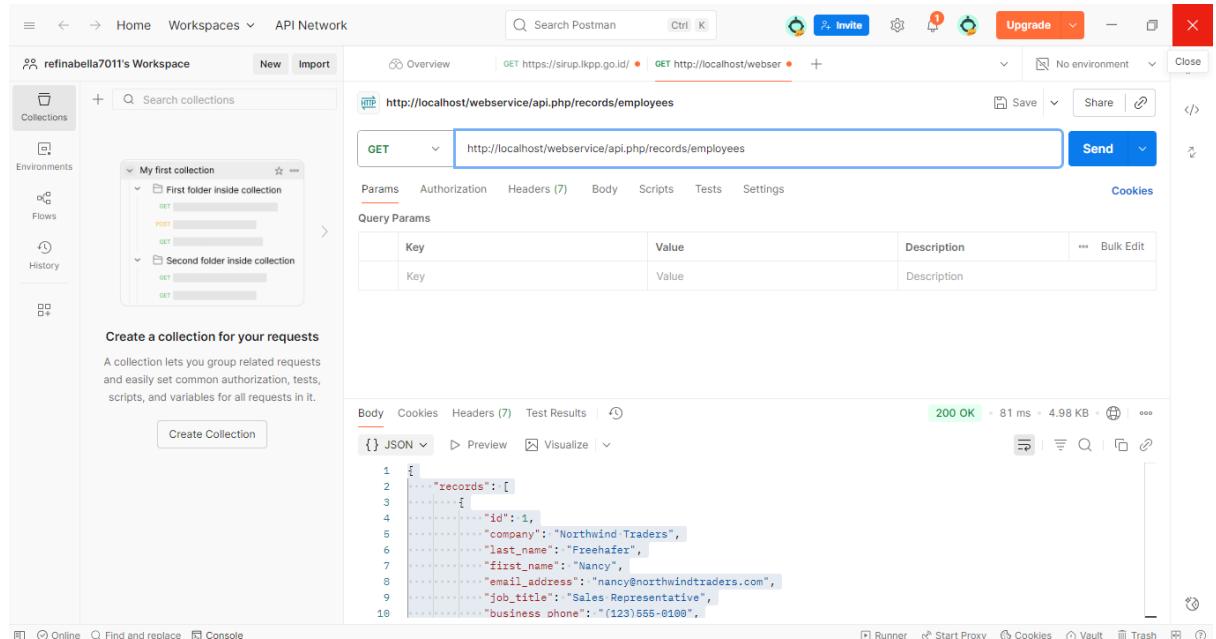
The main request details are:

- Method: GET
- URL: <http://localhost/webservice/api.php/records/products>
- Headers: (7)
- Body: (empty)
- Tests: (empty)
- Settings: (empty)

The response is a 200 OK status with 85 ms latency and 15 KB size. The response body is a JSON object with the following structure:

```
1 {  
2     "records": [  
3         {  
4             "supplier_ids": "4",  
5             "id": 1,  
6             "product_code": "NWTB-1",  
7             "product_name": "Northwind Traders Chai",  
8             "description": null,  
9             "standard_cost": "13.5000",  
10            "list price": "18.0000",  
11        }  
12    ]  
13}
```

<http://localhost/webservice/api.php/records/employees>



The screenshot shows the Postman interface with a collection named "My first collection". Inside this collection, there is a folder "First folder inside collection" containing three requests: GET, POST, and PUT. Another folder "Second folder inside collection" contains two requests: GET and PUT. A "Create a collection for your requests" section is visible.

The main request details are:

- Method: GET
- URL: <http://localhost/webservice/api.php/records/employees>
- Headers: (7)
- Body: (empty)
- Tests: (empty)
- Settings: (empty)

The response is a 200 OK status with 81 ms latency and 4.98 KB size. The response body is a JSON object with the following structure:

```
1 {  
2     "records": [  
3         {  
4             "id": 1,  
5             "company": "Northwind Traders",  
6             "last_name": "Frehaver",  
7             "first_name": "Nancy",  
8             "email_address": "nancy@northwindtraders.com",  
9             "job_title": "Sales Representative",  
10            "business phone": "(123)555-0100",  
11        }  
12    ]  
13}
```

<http://localhost/webservice/api.php/records/suppliers>

The screenshot shows the Postman application interface. On the left, the sidebar displays 'refinabella7011's Workspace' with sections for Collections, Environments, Flows, and History. A 'Create a collection for your requests' section is present. The main workspace shows a 'My first collection' folder containing a 'First folder inside collection' with two GET requests and a 'Second folder inside collection' with two more GET requests. Below this, there is a 'Create Collection' button. The central area shows a GET request to 'http://localhost/webservice/api.php/records/suppliers'. The 'Body' tab shows the JSON response:

```
1 {  
2   "records": [  
3     {  
4       "id": 1,  
5       "company": "Supplier A",  
6       "last_name": "Andersen",  
7       "first_name": "Elizabeth A.",  
8       "email_address": null,  
9       "job_title": "Sales Manager",  
10      "business_phone": null,  
11    }  
12  ]  
13}
```

The response status is 200 OK with a 67 ms duration and 3.67 KB size. The Headers tab shows 'Content-Type: application/json; charset=UTF-8'. The Test Results tab is visible at the top.