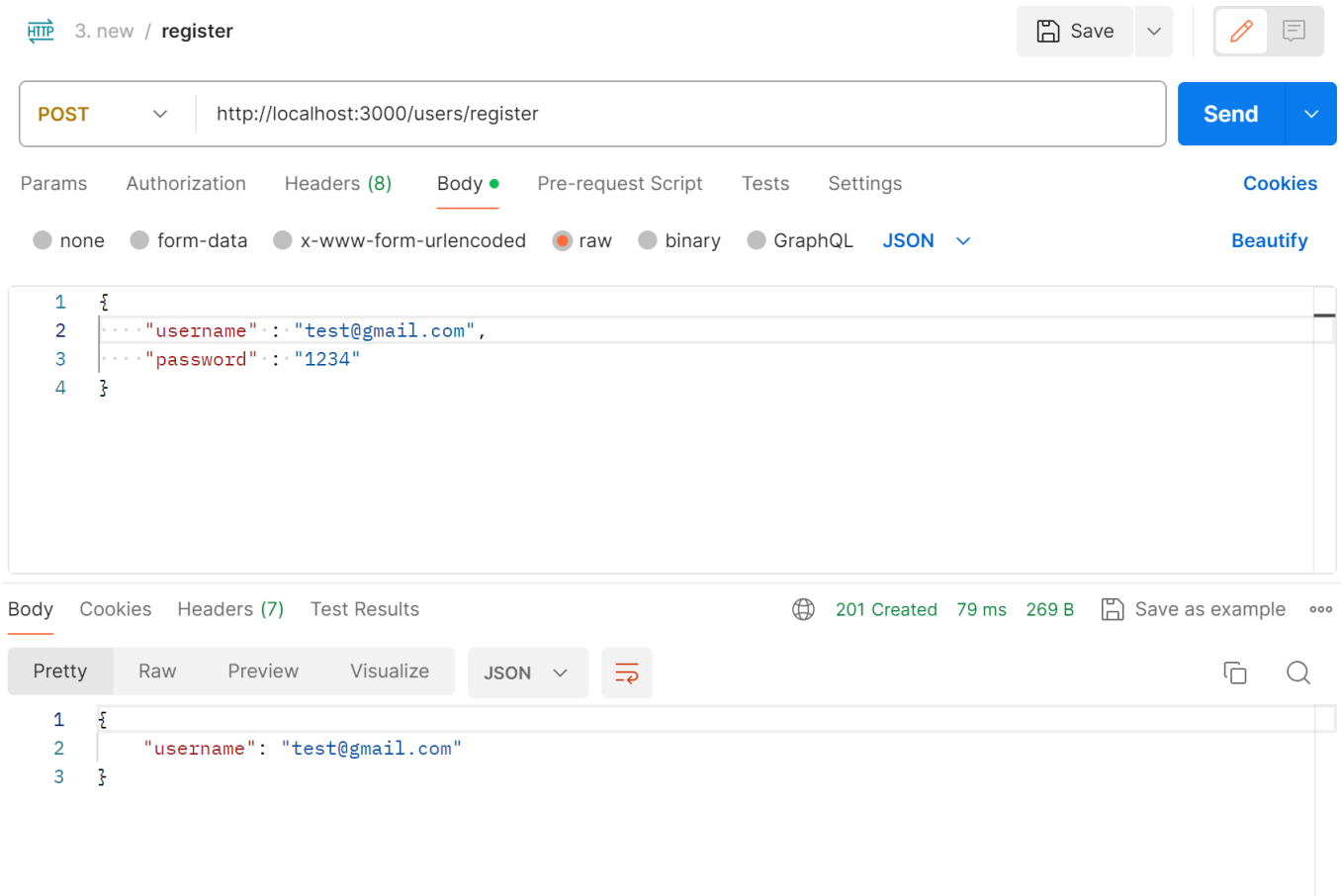


25. 요구사항 최종 확인

1. 회원가입 api

1-1. (일반회원) 사용자는 이메일과 비밀번호로 회원가입할 수 있어야 합니다. 



The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:3000/users/register`
- Method:** `POST`
- Body (JSON):**

```
1 {  
2   "username": "test@gmail.com",  
3   "password": "1234"  
4 }
```
- Response (JSON):**

```
1 {  
2   "username": "test@gmail.com"  
3 }
```

1-2. 이메일은 중복되지 않아야 합니다. 

HTTP 3. new / register

POST http://localhost:3000/users/register

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "username": "test@gmail.com",
3   "password": "1234"
4 }

```

Body Cookies Headers (7) Test Results 500 Internal Server Error 8 ms 306 B Save as example

Pretty Raw Preview Visualize JSON

```

1 {
2   "statusCode": 500,
3   "message": "Internal server error"
4 }

```

```

[Nest] 9324 - 2024. 01. 27. 오후 6:17:35 ERROR [ExceptionHandler] 이미 존재하는 이메일입니다.
Error: 이미 존재하는 이메일입니다.
    at UsersService.register (C:\gits\ops-test\src\users\users.service.ts:87:13)
    at processTicksAndRejections (node:internal/process/task_queues:95:5)
    at UsersController.register (C:\gits\ops-test\src\users\users.controller.ts:32:18)
    at C:\gits\ops-test\node_modules\@nestjs\core\router\router-execution-context.js:46:28
    at C:\gits\ops-test\node_modules\@nestjs\core\router\router-proxy.js:9:17

```

1-3. 비밀번호는 안전한 방식으로 저장되어야 합니다. ✓

ORCL * <database-9... EMP database-9... cbthub opstest opstest * <opstest> ...

SELECT * FROM opstest.`user` u ;

user 1

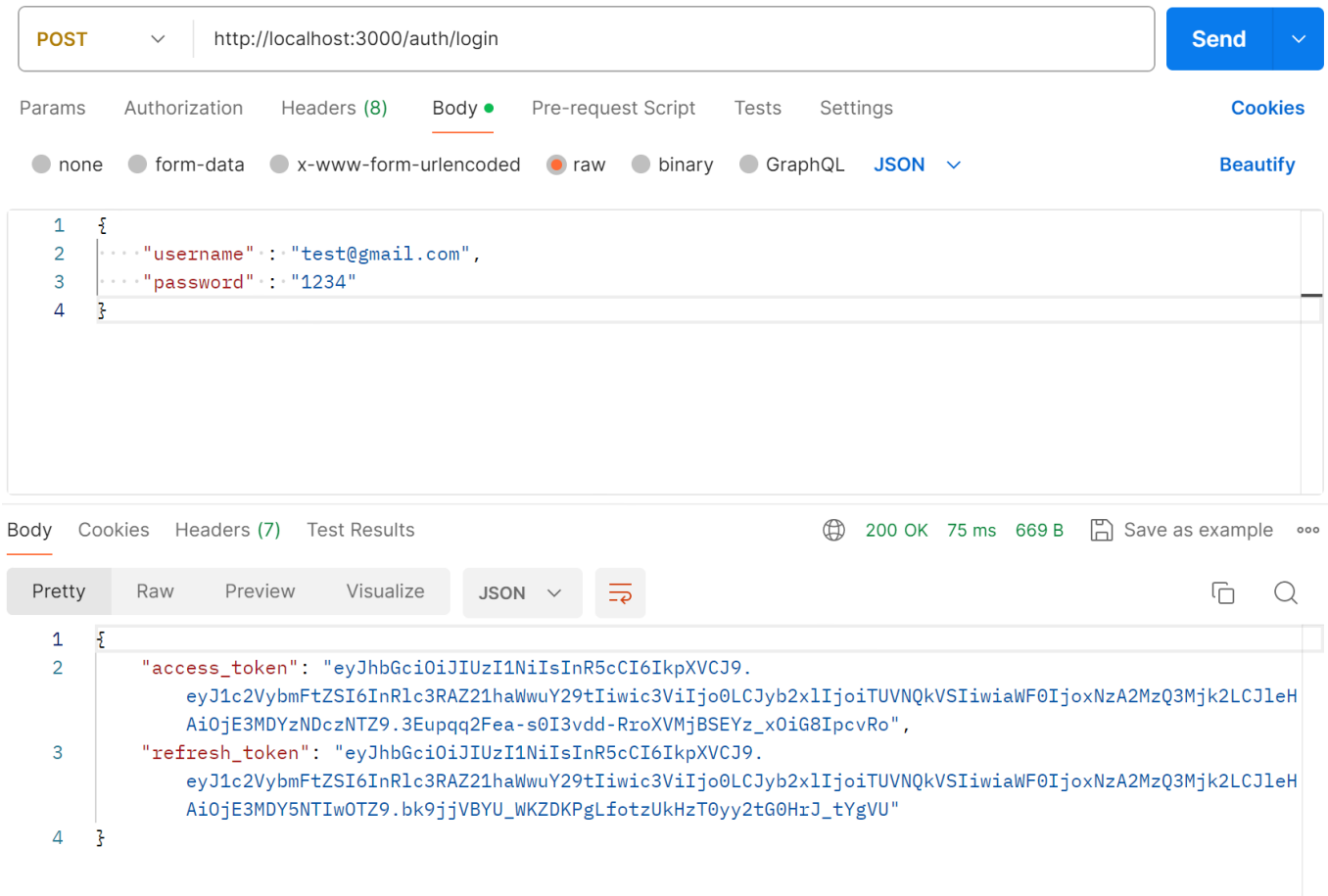
SELECT * FROM opstest.`user` u

	id	username	password	role	verificationCode
1	1	test5@gmail.com	\$2b\$10\$h2ukw9Vbl.FUV0ajKHtaG.	MEMBER	0.19cfrkhdcth
2	2	test6@gmail.com	\$2b\$10\$ymEjEX3.cRhXMbs0EYLC	MEMBER	0.19cfrkhdcth
3	3	newnyup@gmail.com	\$2b\$10\$jP/MseYsFnhVs5cqmqzTT	MEMBER	gzlpz0fj
4	4	test@gmail.com	\$2b\$10\$W6uD1VQsNlcBwyORZim	MEMBER	0.27czi6khcbf

2. 로그인 API

2-1. 이메일과 비밀번호로 로그인할 수 있어야 합니다. ✓

2-2. 로그인 성공 시 JWT 토큰을 발급합니다.



The screenshot displays a REST client interface. At the top, a POST request is configured to `http://localhost:3000/auth/login`. The request body is a JSON object with `username: "test@gmail.com"` and `password: "1234"`. Below the request, the response is shown in the 'Body' tab, displaying a JSON object with `access_token` and `refresh_token` fields. The status bar indicates a 200 OK response with a 75 ms duration and 669 B of data.

```
1 {
2   "username": "test@gmail.com",
3   "password": "1234"
4 }
```

```
1 {
2   "access_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6InRlc3RAZ21haWwY29tIiwic3ViIjo0LCJyb2x1IjoiTUVNQkVSIiwiaWF0IjoxNzA2MzQ3Mjk2LCJleHAiOjE3MDYzNDc3NTZ9.3Eupqq2Fea-s0I3vdd-RroXVMjBSEYz_x0iG8IpcvRo",
3   "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6InRlc3RAZ21haWwY29tIiwic3ViIjo0LCJyb2x1IjoiTUVNQkVSIiwiaWF0IjoxNzA2MzQ3Mjk2LCJleHAiOjE3MDY3NTIwOTZ9.bk9jjvBYU_WKZDKPgLfotzUkHdT0yy2tG0HrJ_tYgVU"
4 }
```

200 OK 75 ms 669 B Save as example

3. 비밀번호 변경 API

3-1. 로그인한 사용자는 비밀번호를 변경할 수 있어야 합니다.

HTTP 3. new / change-password Save Send

PATCH http://localhost:3000/auth/change-password

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```

1 {
2   "currentPassword": "1234",
3   "newPassword": "12345"
4 }

```

Body Cookies Headers (7) Test Results 200 OK 114 ms 287 B Save as example

Pretty Raw Preview Visualize JSON

```

1 {
2   "message": "비밀번호가 변경되었습니다."
3 }

```

3-2. 새로운 비밀번호는 안전한 방식으로 저장되어야 합니다.

ORCL *database-9... EMP database-9... cbthub opstest opstest *opstest> ...

SELECT * FROM opstest.`user` u ;

user 1

SELECT * FROM opstest.`user` u Enter a SQL expression to filter results (use Ctrl+Space)

	id	username	password	role	verificationCode
1	1	test5@gmail.com	\$2b\$10\$h2ukw9Vbl.FUV0ajKHtaG.	MEMBER	0.19cfrkhdcth
2	2	test6@gmail.com	\$2b\$10\$ymEjyEX3.cRhXMbs0EYLC	MEMBER	0.19cfrkhdcth
3	3	newnyup@gmail.com	\$2b\$10\$6F08j/BNwdxPoYKivHkCie	MEMBER	gzlpz0fj
4	4	test@gmail.com	\$2b\$10\$W6uD1VQsNlcBwyORZim	MEMBER	0.27czi6khcbf

4. 회원 목록 조회 API

4-1. 시스템에 등록된 회원 목록을 조회할 수 있어야 합니다.

4-2. 단, 관리자만 조회 가능합니다.

POST

http://localhost:3000/users/register

Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON

Beautify

```
1 {
2   "username": "newnyup@gmail.com",
3   "password": "1234",
4   "role": "ADMIN"
5 }
```

Body Cookies Headers (7) Test Results

201 Created 66 ms 272 B Save as example

Pretty

Raw

Preview

Visualize

JSON

Send

Copy

Search

```
1 {
2   "username": "newnyup@gmail.com"
3 }
```

관리자로 가입

SELECT * FROM opstest.`user` u ;

user 1

SELECT * FROM opstest.`user` u Enter a SQL expression to filter results (use Ctrl+Space)

	id	username	password	role	verificationCode
1	5	newnyup@gmail.com	\$2b\$10\$WF37gAwTjBpuROh.qn0g	ADMIN	43z8pm7p

- 유저 조회 가능

HTTP 3. new / findUsers Save

GET http://localhost:3000/users/ Send

Params	Authorization	Headers (7)	Body	Pre-request Script	Tests	Settings	Cookies
<input checked="" type="checkbox"/>	Host		<calculated when request is sent>				
<input checked="" type="checkbox"/>	User-Agent		PostmanRuntime/7.36.1				
<input checked="" type="checkbox"/>	Accept		*/*				
<input checked="" type="checkbox"/>	Accept-Encoding		gzip, deflate, br				
<input checked="" type="checkbox"/>	Connection		keep-alive				
<input checked="" type="checkbox"/>	Authorization		Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6Ikp...				
	Key		Value			Description	

Body Cookies Headers (7) Test Results 200 OK 7 ms 868 B Save as example

Pretty Raw Preview Visualize JSON

```

2  {
3    "id": 5,
4    "username": "newnyup@gmail.com",
5    "password": "$2b$10$WF37gAwTjBpuR0h.qn0gHeTDiInqc9/vWnzEcCyXt2xX140LHbADG",
6    "role": "ADMIN",
7    "verificationCode": "43z8pm7p",
8    "isVerified": true,
9    "refreshToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6Im5ld255dXBpY29tIiwic3ViIjo1LCJyb2x1IjoiaURUNSU4iLCJpYXQiOjE3MDYzNDc2NDcsImV4cCI6MTcwNjk1MjQ0N30.qMkr-ZWzF-Tlb7g3ldhfR40rv59Es1iorwY34Zof62w",
10   "refreshToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6Im5ld255dXBpY29tIiwic3ViIjo1LCJyb2x1IjoiaURUNSU4iLCJpYXQiOjE3MDYzNDc2NDcsImV4cCI6MTcwNjk1MjQ0N30.qMkr-ZWzF-Tlb7g3ldhfR40rv59Es1iorwY34Zof62w"

```

HTTP 3. new / findUsers Save

GET http://localhost:3000/users/ Send

Params	Authorization	Headers (7)	Body	Pre-request Script	Tests	Settings	Cookies
<input checked="" type="checkbox"/>	Host		<calculated when request is sent>				
<input checked="" type="checkbox"/>	User-Agent		PostmanRuntime/7.36.1				
<input checked="" type="checkbox"/>	Accept		*/*				
<input checked="" type="checkbox"/>	Accept-Encoding		gzip, deflate, br				
<input checked="" type="checkbox"/>	Connection		keep-alive				
<input checked="" type="checkbox"/>	Authorization		Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6Ikp...				
	Key		Value			Description	

Body Cookies Headers (7) Test Results 401 Unauthorized 6 ms 335 B Save as example

Pretty Raw Preview Visualize JSON

```

1  {
2    "message": "관리자만 접근 가능합니다.",
3    "error": "Unauthorized",
4    "statusCode": 401
5  }

```