COMPREHENHENSIVE API TESTING WITH POSTMAN
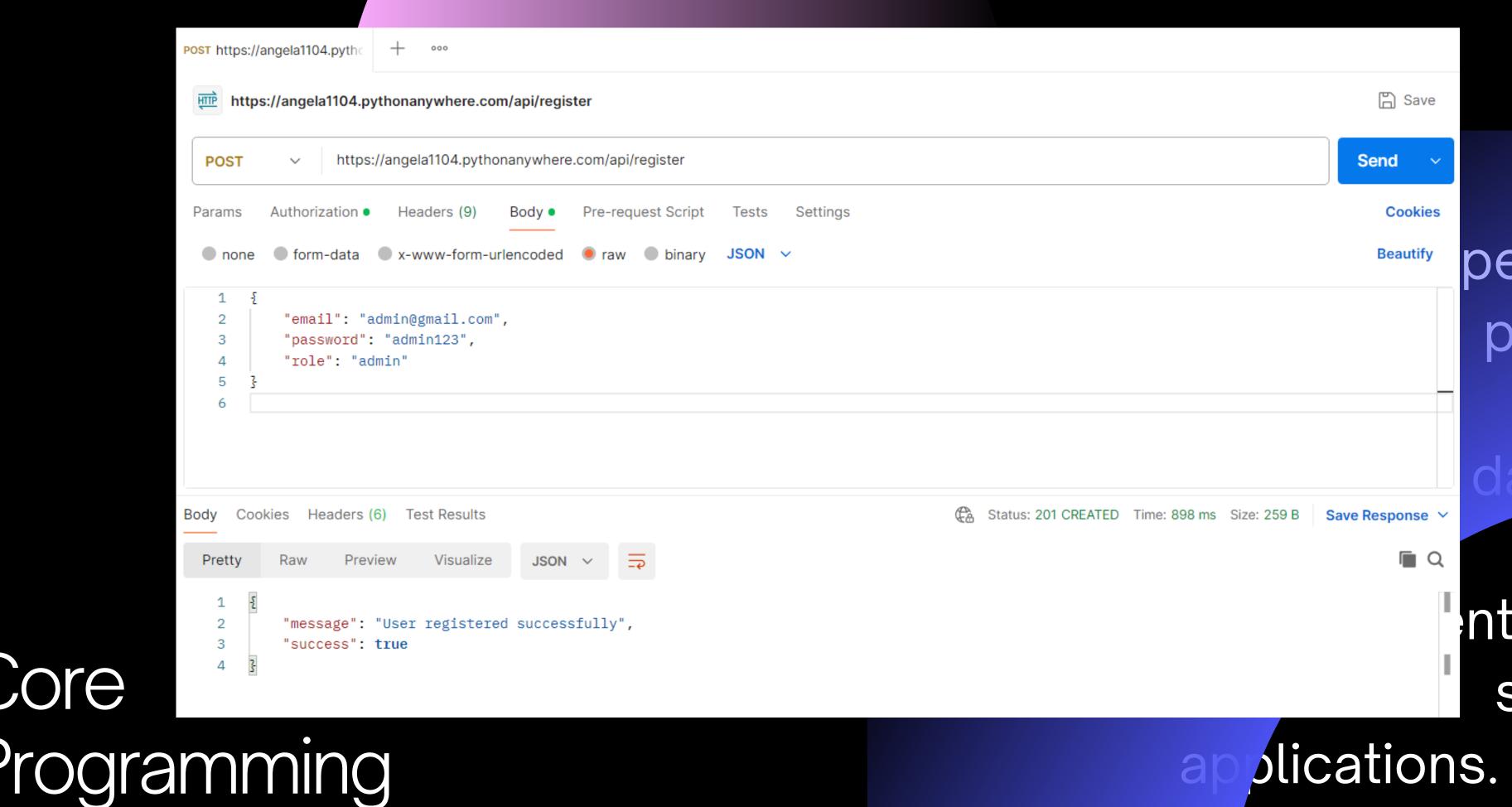
step-by-step guide

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ADMIN

Security is essential to
Our programmers follow
encryption, authentica
assessment to protect
secure applications.

POST https://angela.pytho   +   ∘∘∘

https://angela1104.pythonanywhere.com/api/register   Save

| POST ∨ | https://angela1104.pythonanywhere.com/api/register | Send ∨ |

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON ∨   Beautify

```
1  {
2      "email": "admin@gmail.com",
3      "password": "admin123",
4      "role": "admin"
5  }
6
```

Body   Cookies   Headers (6)   Test Results   Status: 201 CREATED   Time: 898 ms   Size: 259 B   Save Response ∨

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  {
2      "message": "User registered successfully",
3      "success": true
4  }
```

Core
Programming

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POST https://angela1104.pytho [+] ∘∘∘

🔲 HTTP https://angela1104.pythonanywhere.com/api/login   💾 Save

POST ⌄   https://angela1104.pythonanywhere.com/api/login   **Send** ⌄

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   **JSON** ⌄   **Beautify**

```
1  {
2      "email": "admin@gmail.com",
3      "password": "admin123",
4      "role": "admin"
5  }
6
```

Body   Cookies   Headers (6)   Test Results   🔒 Status: 200 OK   Time: 1590 ms   Size: 390 B   **Save Response** ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2      "success": true,
3      "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX2lkIjoyMywicm9sZSI6ImFkbWluIiwiZXhwIjoxNzMzOTI4MjE2LCJpYXQiOjE3MzM5MjQ2MTZ9.
        A0EFLhIPsq1GwTfn5qQvdtjsqlEiLeFn3izpj9Toj3w"
4  }
```
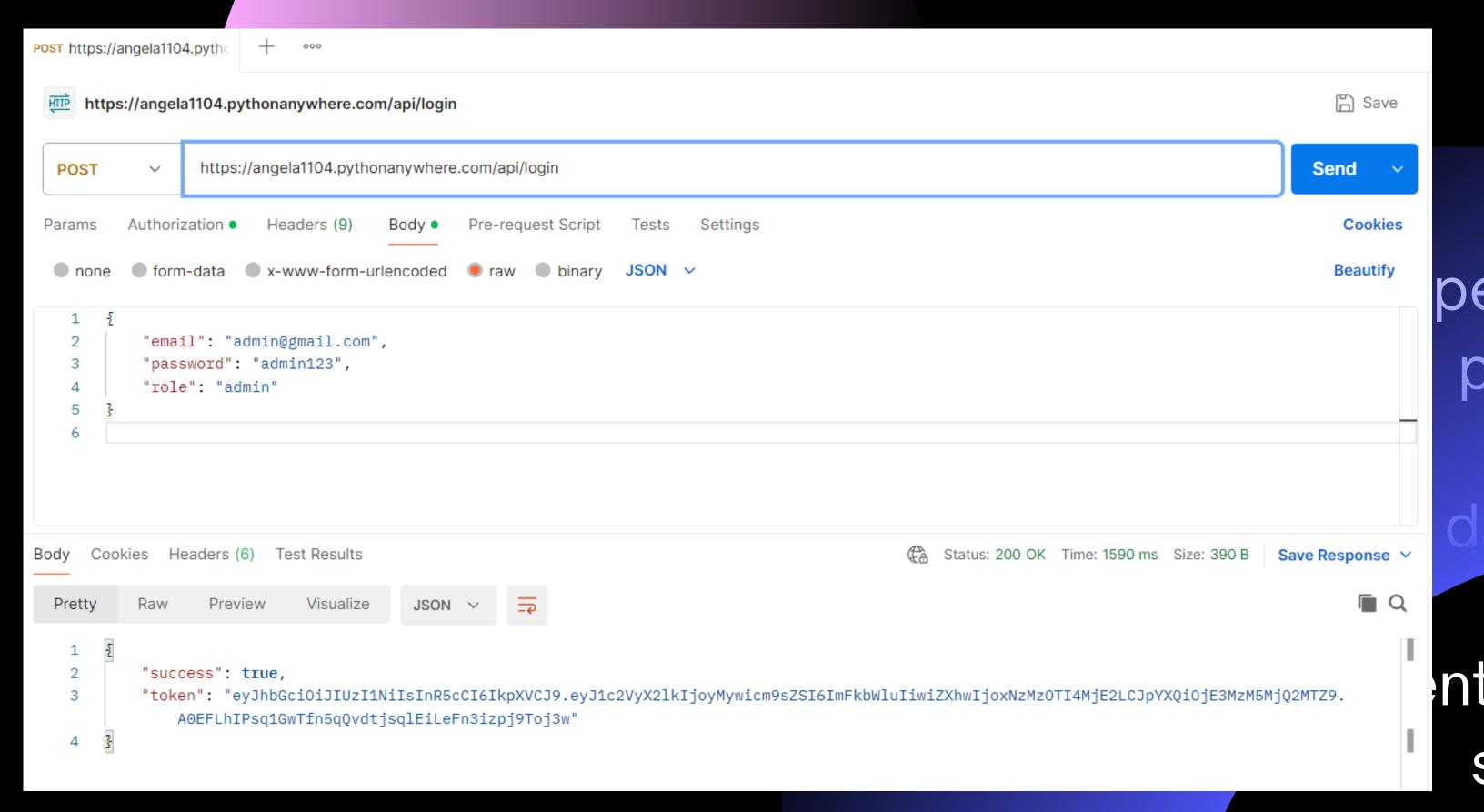
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COURSES TABLE

Security is essential to
Our programmers follow
encryption, authentication
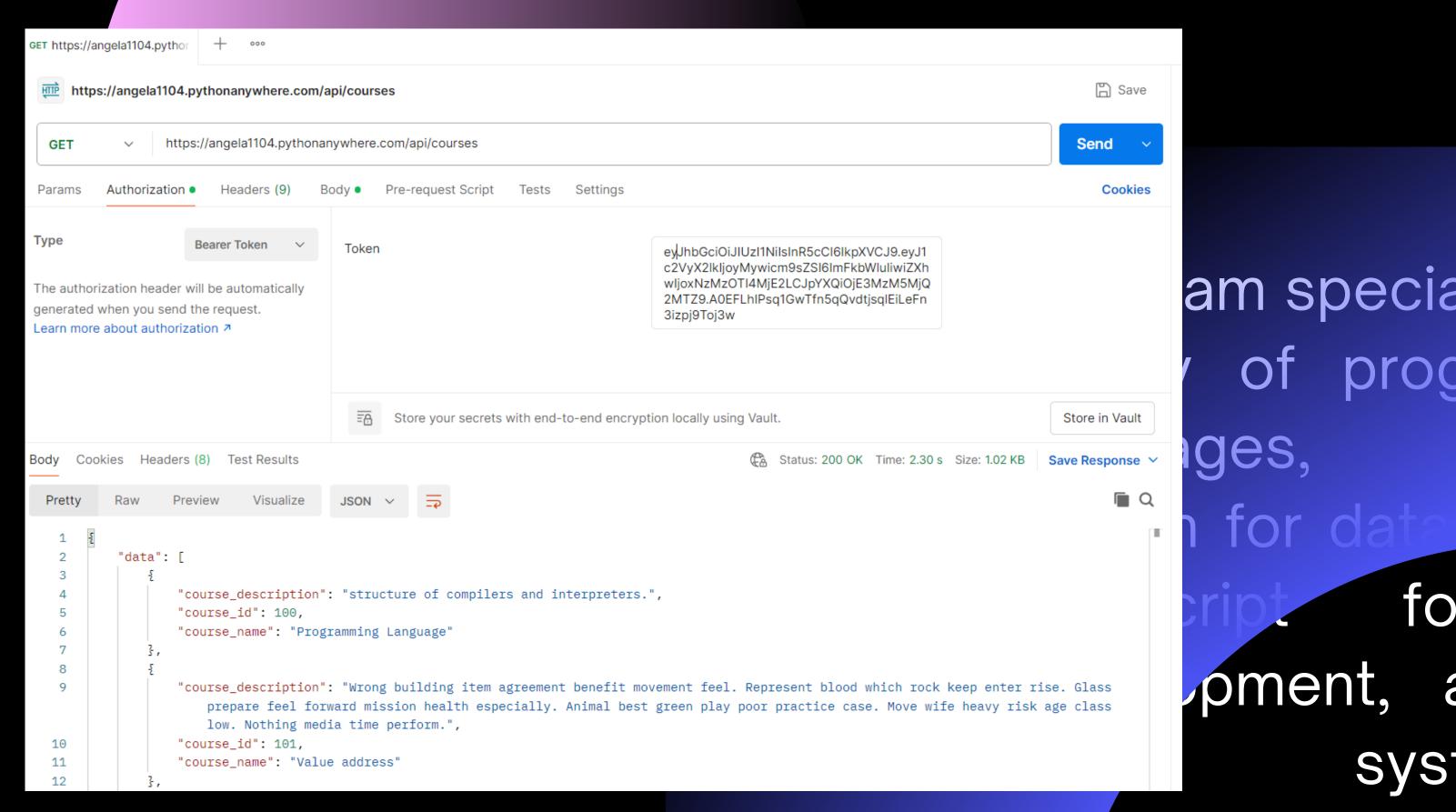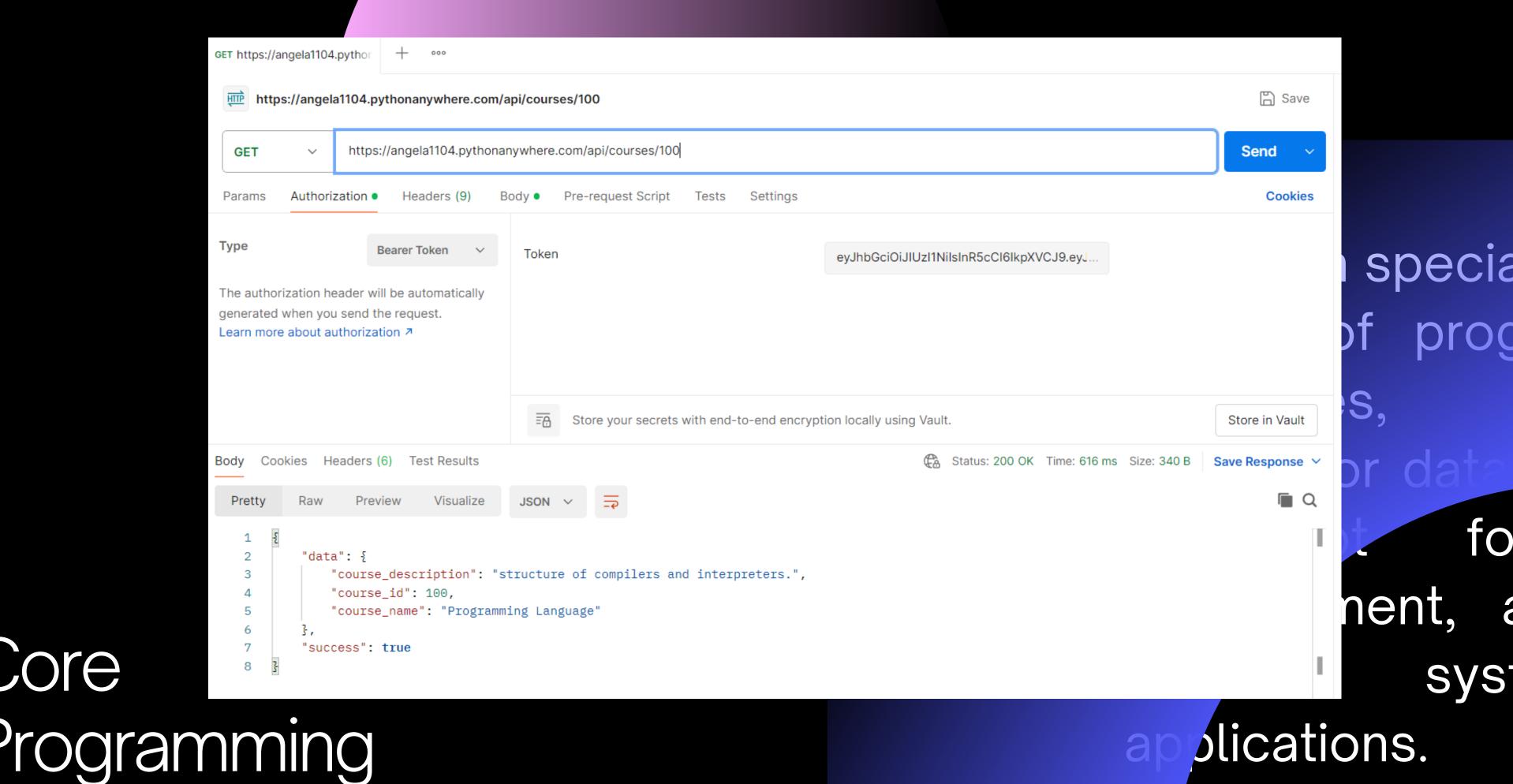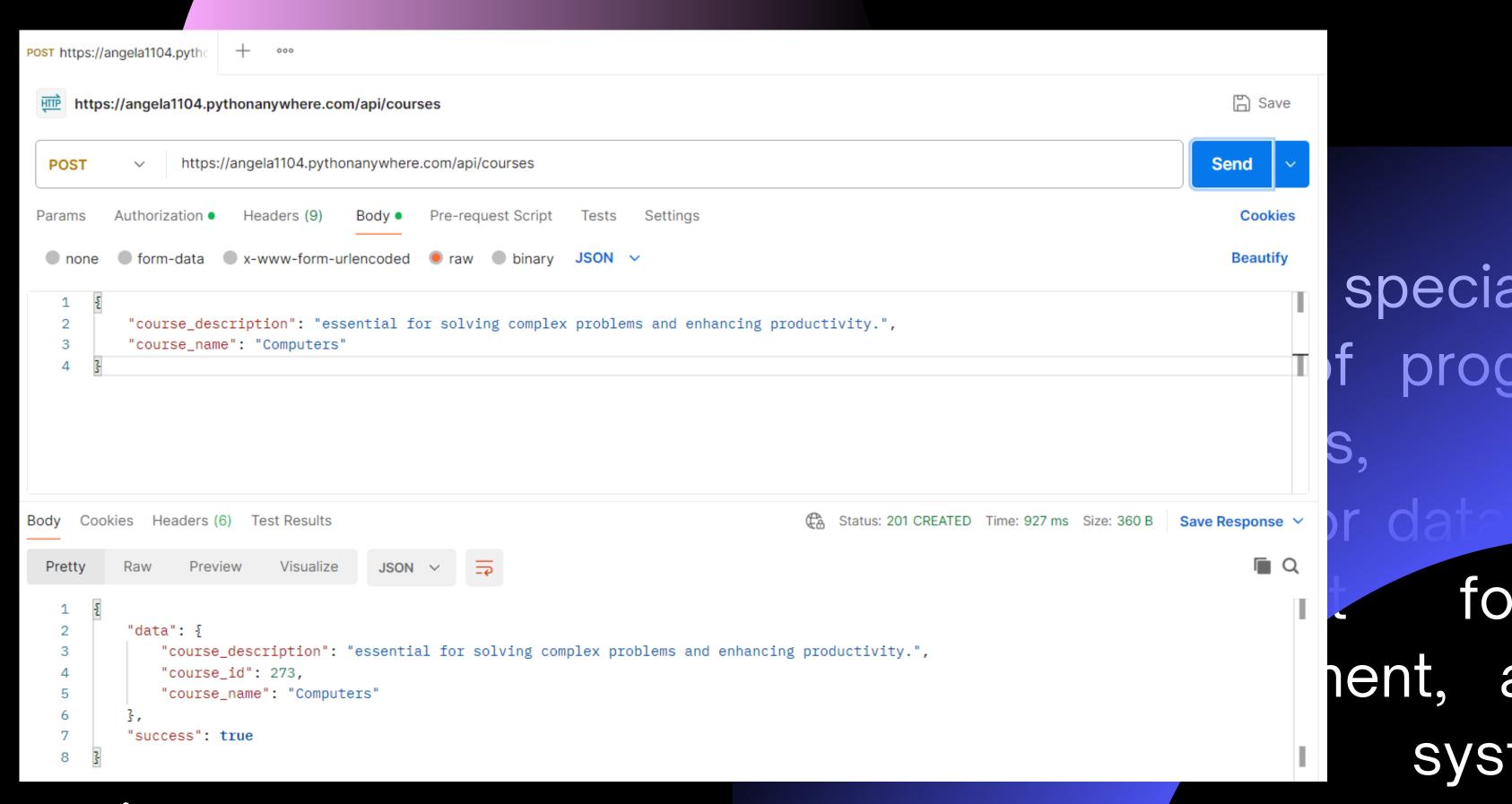assessment to protect
secure applications.

GET https://angela.pythor

HTTP https://angela1104.pythonanywhere.com/api/courses

Save

GET ⌄ https://angela1104.pythonanywhere.com/api/courses

Send ⌄

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

Cookies

Type

Bearer Token ⌄

The authorization header will be automatically generated when you send the request.

Learn more about authorization ↗

Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX2lkIjoyMywicm9sZSI6ImFkbWluIiwiZXhwIjoxNzMzOTI4MjE2LCJpYXQiOjE3MzM5MjQ2MTZ9.A0EFLhIPsq1GwTfn5qQvdtjsqlEiLeFn3izpj9Toj3w

🔒 Store your secrets with end-to-end encryption locally using Vault.

Store in Vault

Body Cookies Headers (8) Test Results

Status: 200 OK Time: 2.30 s Size: 1.02 KB

Save Response ⌄

Pretty Raw Preview Visualize JSON ⌄

```
 1  {
 2      "data": [
 3          {
 4              "course_description": "structure of compilers and interpreters.",
 5              "course_id": 100,
 6              "course_name": "Programming Language"
 7          },
 8          {
 9              "course_description": "Wrong building item agreement benefit movement feel. Represent blood which rock keep enter rise. Glass prepare feel forward mission health especially. Animal best green play poor practice case. Move wife heavy risk age class low. Nothing media time perform.",
10              "course_id": 101,
11              "course_name": "Value address"
12          },
```

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https://angela1104.pythonanywhere.com/api/courses/100

💾 Save

GET ▾ | https://angela1104.pythonanywhere.com/api/courses/100 | Send ▾

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

Type   Bearer Token ▾   Token   eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.ey...

The authorization header will be automatically
generated when you send the request.

Learn more about authorization ↗

🔒 Store your secrets with end-to-end encryption locally using Vault.   Store in Vault

Body Cookies Headers (6) Test Results   🌐 Status: 200 OK Time: 616 ms Size: 340 B Save Response ▾

Pretty Raw Preview Visualize | JSON ▾ |

```
1  {
2      "data": {
3          "course_description": "structure of compilers and interpreters.",
4          "course_id": 100,
5          "course_name": "Programming Language"
6      },
7      "success": true
8  }
```

Core
Programming

PUT https://angela1104.pythor

https://angela1104.pythonanywhere.com/api/courses/273

Save

PUT | https://angela1104.pythonanywhere.com/api/courses/273 | Send

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

none | form-data | x-www-form-urlencoded | raw | binary | JSON ⌄ | Beautify

```json
1  {
2      "course_description": "(Updated)essential for solving complex problems and enhancing productivity.",
3      "course_name": "Computers"
4  }
```

Body | Cookies | Headers (6) | Test Results | Status: 200 OK | Time: 388 ms | Size: 253 B | Save Response ⌄

Pretty | Raw | Preview | Visualize | JSON ⌄

```json
1  {
2      "message": "Course updated successfully",
3      "success": true
4  }
```

Core
Programming

DEL https://angela.python

https://angela1104.pythonanywhere.com/api/courses/273

Save

DELETE | https://angela1104.pythonanywhere.com/api/courses/273 | Send

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

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

```
1  {
2      "course_description": "(Updated)essential for solving complex problems and enhancing productivity.",
3      "course_name": "Computers"
4  }
```

Body | Cookies | Headers (6) | Test Results | Status: 200 OK | Time: 558 ms | Size: 261 B | Save Response

Pretty | Raw | Preview | Visualize | JSON

```
1  {
2      "message": "Course with ID 273 has been deleted",
3      "success": true
4  }
```

Core
Programming

STUDENTS TABLE

Security is essential to
Our programmers follow
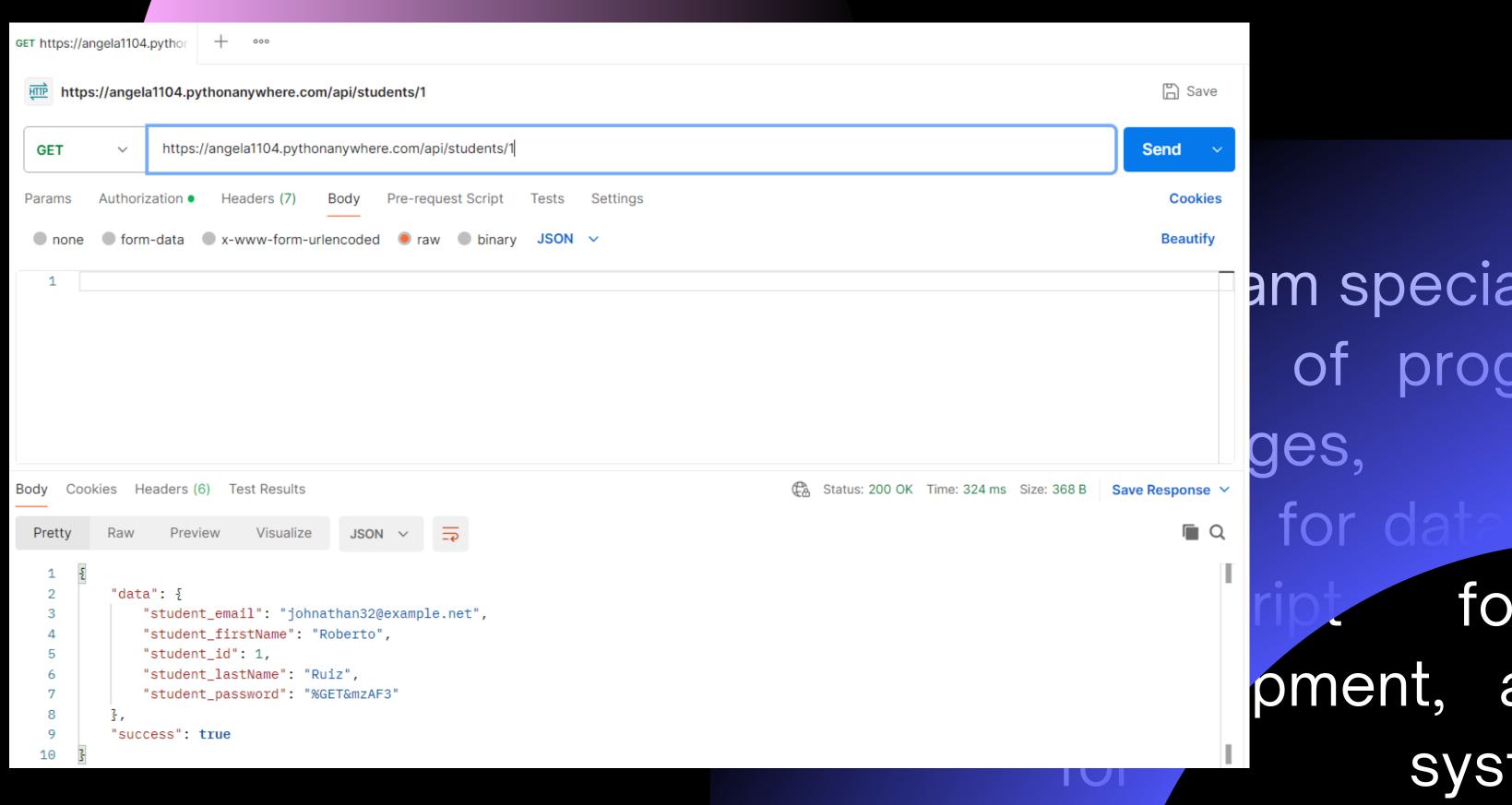encryption, authentication
assessment to protect
secure applications.

GET https://angela1104.python
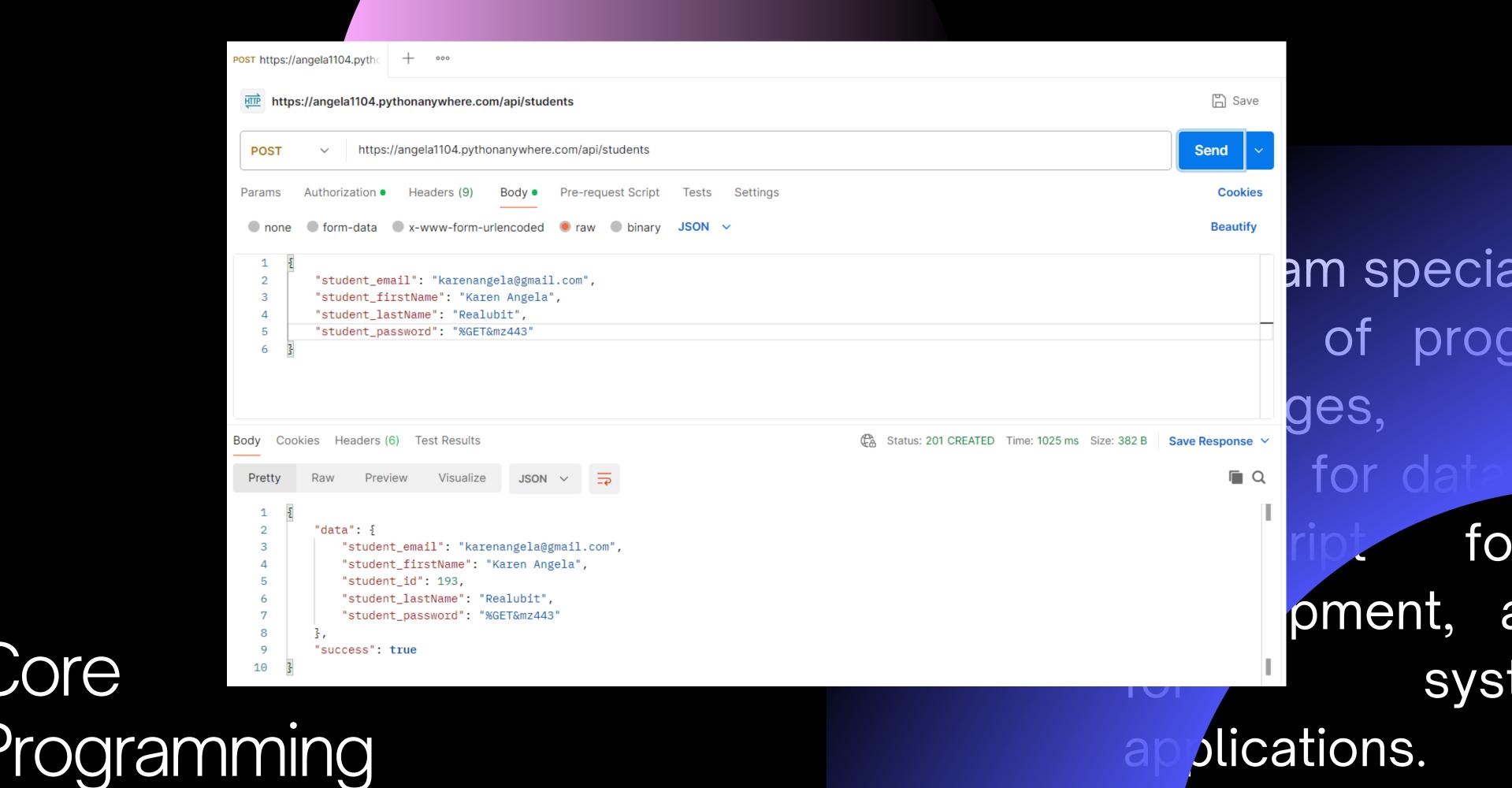
https://angela1104.pythonanywhere.com/api/students   Save

GET ⌄   https://angela1104.pythonanywhere.com/api/students   Send ⌄

Params   Authorization •   Headers (7)   Body   Pre-request Script   Tests   Settings   Cookies

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

1

Body   Cookies   Headers (8)   Test Results   Status: 200 OK   Time: 510 ms   Size: 1.4 KB   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1    {
2        "data": [
3            {
4                "student_email": "johnathan32@example.net",
5                "student_firstName": "Roberto",
6                "student_id": 1,
7                "student_lastName": "Ruiz",
8                "student_password": "%GET&mzAF3"
9            },
10            {
11                "student_email": "danielwilson@example.org",
12                "student_firstName": "James",
13                "student_id": 2,
14                "student_lastName": "Robertson",
15                "student_password": "^!P1Zx02^$"
16            },
```

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GET https://angela1104.python

https://angela1104.pythonanywhere.com/api/students/1

Save

GET | https://angela1104.pythonanywhere.com/api/students/1 | Send

Params | Authorization ● | Headers (7) | Body | Pre-request Script | Tests | Settings | Cookies

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

1

Body | Cookies | Headers (6) | Test Results | Status: 200 OK | Time: 324 ms | Size: 368 B | Save Response

Pretty | Raw | Preview | Visualize | JSON

```
1  {
2    "data": {
3      "student_email": "johnathan32@example.net",
4      "student_firstName": "Roberto",
5      "student_id": 1,
6      "student_lastName": "Ruiz",
7      "student_password": "%GET&mzAF3"
8    },
9    "success": true
10 }
```

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Core
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Core Programming

PUT https://angela1104.pythor   +   ᵒᵒᵒ

HTTP https://angela1104.pythonanywhere.com/api/students/193   💾 Save

PUT ⌄   https://angela1104.pythonanywhere.com/api/students/193   Send ⌄

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON ⌄   Beautify

```
1  {
2      "student_email": "karenangela@gmail.com",
3      "student_firstName": "(Updated)Karen Angela",
4      "student_lastName": "Realubit",
5      "student_password": "%GET&mz443"
6  }
```

Body   Cookies   Headers (6)   Test Results   Status: 200 OK   Time: 483 ms   Size: 254 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2      "message": "Student updated successfully",
3      "success": true
4  }
```

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Core
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DEL https://angela1104.python   +   ○○○

HTTP **https://angela1104.pythonanywhere.com/api/students/193**   🖫 Save

DELETE ⌄   https://angela1104.pythonanywhere.com/api/students/193   **Send** ⌄

Params   Authorization ●   Headers (7)   Body   Pre-request Script   Tests   Settings   **Cookies**

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   **JSON** ⌄   **Beautify**

1

Body   Cookies   Headers (6)   Test Results   Status: **200 OK**   Time: **889 ms**   Size: **262 B**   **Save Response** ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2      "message": "Student with ID 193 has been deleted",
3      "success": true
4  }
```

Core
Programming

Security is essential to
Our programmers follow
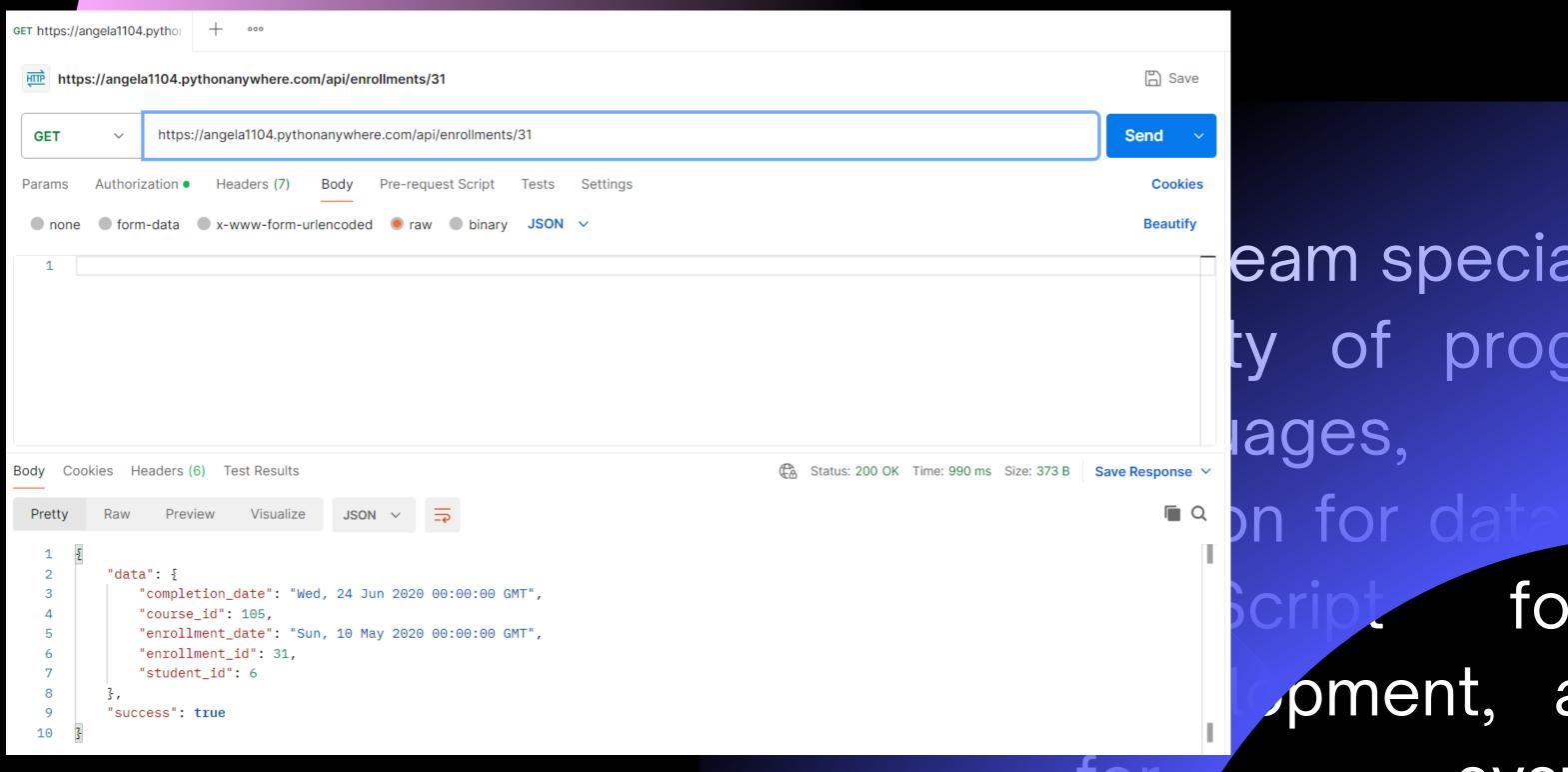encryption, authentication
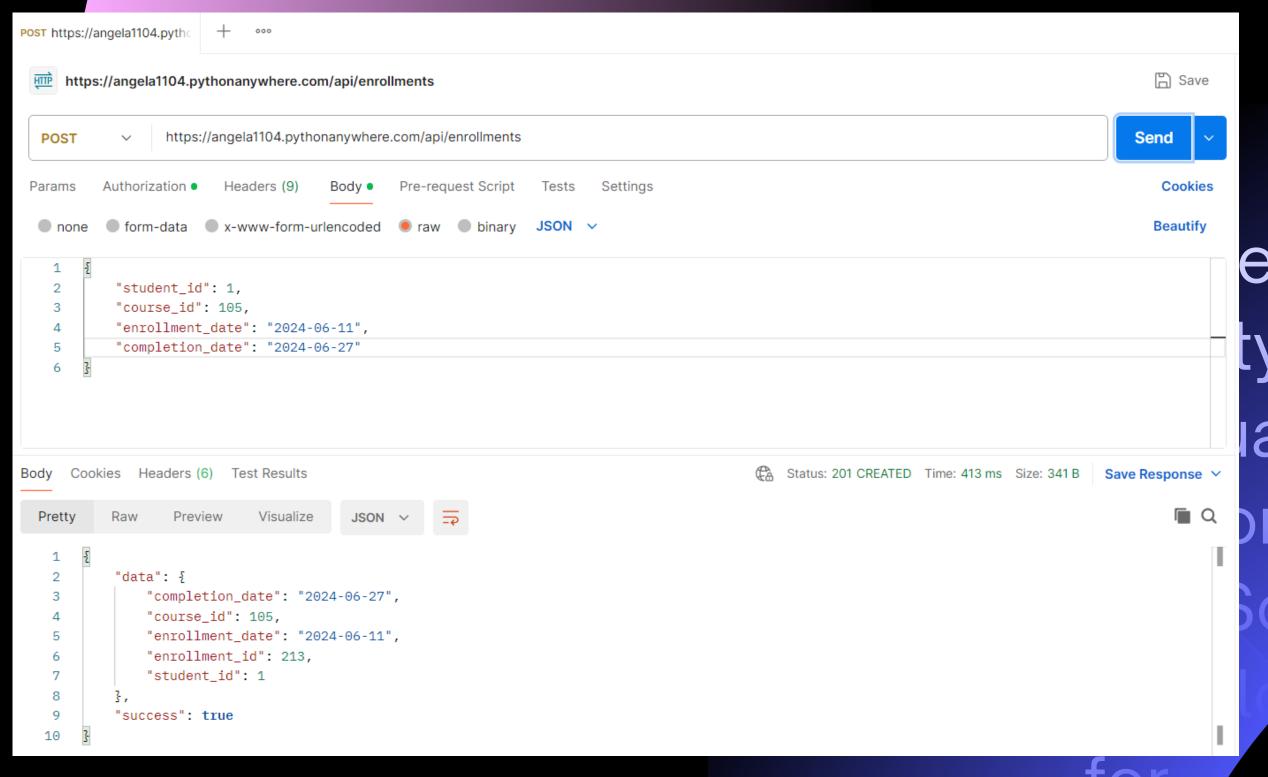assessment to protect
secure applications.

ENROLLMENTS TABLE

GET https://angela1104.pythor

HTTP https://angela1104.pythonanywhere.com/api/enrollments   Save

GET ⌄   https://angela1104.pythonanywhere.com/api/enrollments   Send ⌄

Params   Authorization ●   Headers (7)   Body   Pre-request Script   Tests   Settings   Cookies

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary   JSON ⌄   Beautify

```
1
```

Body   Cookies   Headers (8)   Test Results   Status: 200 OK   Time: 718 ms   Size: 1019 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
 1  {
 2      "data": [
 3          {
 4              "completion_date": "Wed, 24 Jun 2020 00:00:00 GMT",
 5              "course_id": 105,
 6              "enrollment_date": "Sun, 10 May 2020 00:00:00 GMT",
 7              "enrollment_id": 31,
 8              "student_id": 6
 9          },
10          {
11              "completion_date": "Sun, 01 Sep 2024 00:00:00 GMT",
12              "course_id": 103,
13              "enrollment_date": "Sat, 28 Mar 2020 00:00:00 GMT",
14              "enrollment_id": 32,
15              "student_id": 16
16          },
```

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Core
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Core
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POST https://angela1104.pytho

https://angela1104.pythonanywhere.com/api/enrollments

Save

POST https://angela1104.pythonanywhere.com/api/enrollments Send

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

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

```
1  {
2      "student_id": 1,
3      "course_id": 105,
4      "enrollment_date": "2024-06-11",
5      "completion_date": "2024-06-27"
6  }
```

Body Cookies Headers (6) Test Results   Status: 201 CREATED Time: 413 ms Size: 341 B Save Response

Pretty Raw Preview Visualize JSON

```
1  {
2      "data": {
3          "completion_date": "2024-06-27",
4          "course_id": 105,
5          "enrollment_date": "2024-06-11",
6          "enrollment_id": 213,
7          "student_id": 1
8      },
9      "success": true
10 }
```

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PUT https://angela1104.python...

https://angela1104.pythonanywhere.com/api/enrollments/213

Save

PUT | https://angela1104.pythonanywhere.com/api/enrollments/213 | Send

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

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary JSON ⌄   Beautify

```json
1  {
2      "student_id": 10,
3      "course_id": 105,
4      "enrollment_date": "2024-06-11",
5      "completion_date": "2024-06-27"
6  }
```

Body Cookies Headers (6) Test Results   Status: 200 OK Time: 1754 ms Size: 257 B   Save Response ⌄

Pretty Raw Preview Visualize JSON ⌄

```json
1  {
2      "message": "Enrollment updated successfully",
3      "success": true
4  }
```
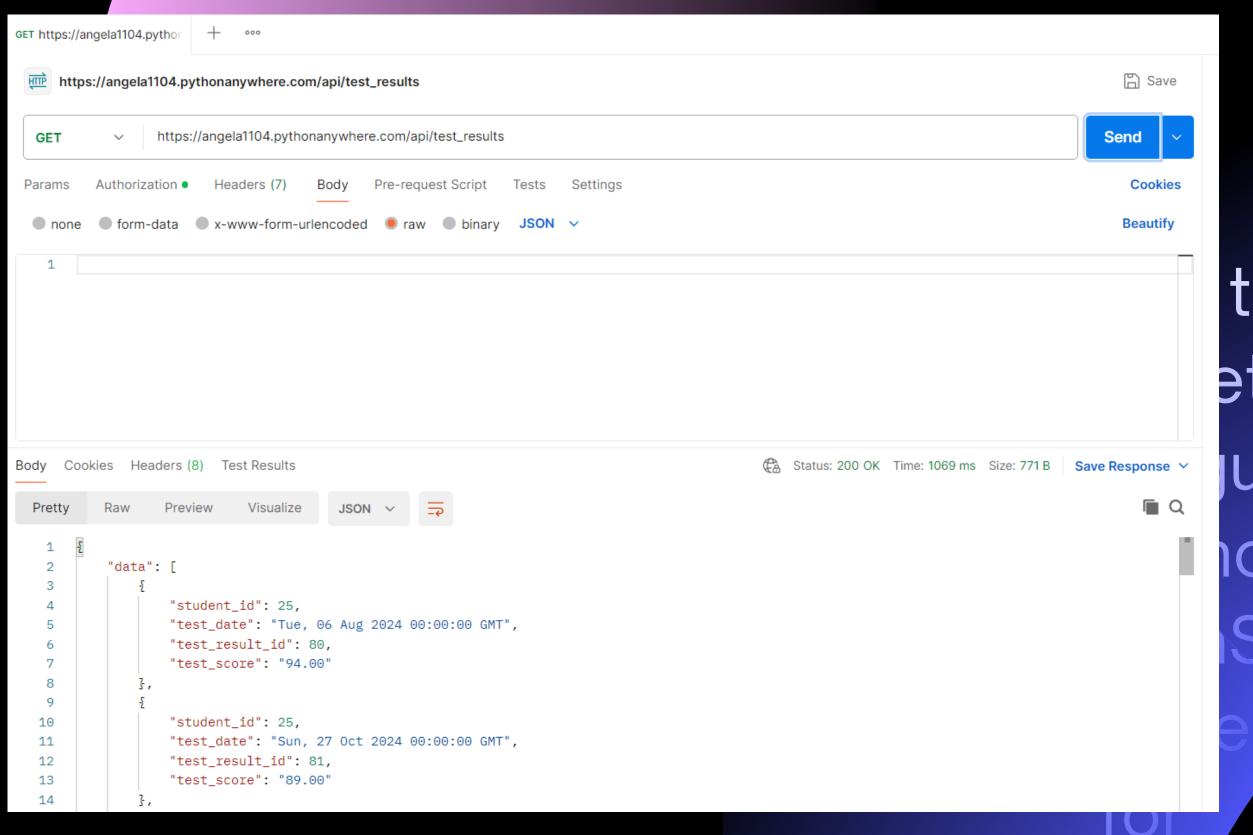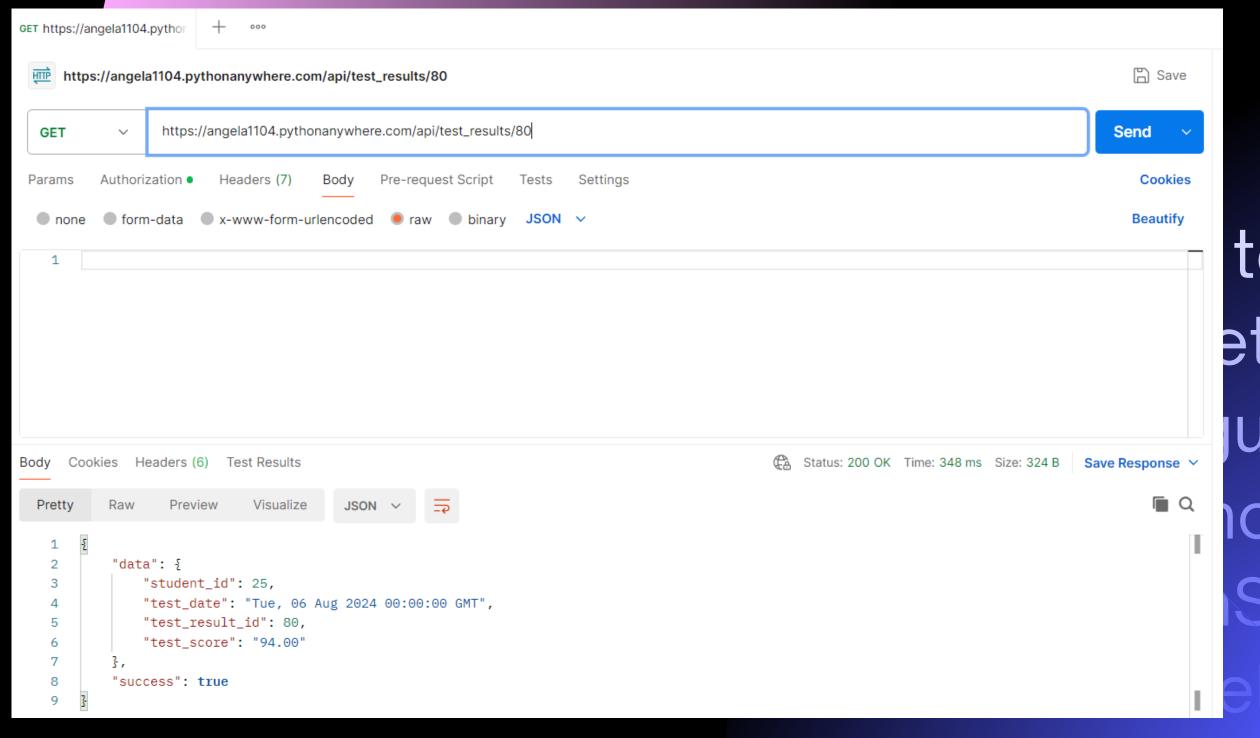
Core
Programming

Security is essential to
Our programmers follow
encryption, authenticatio
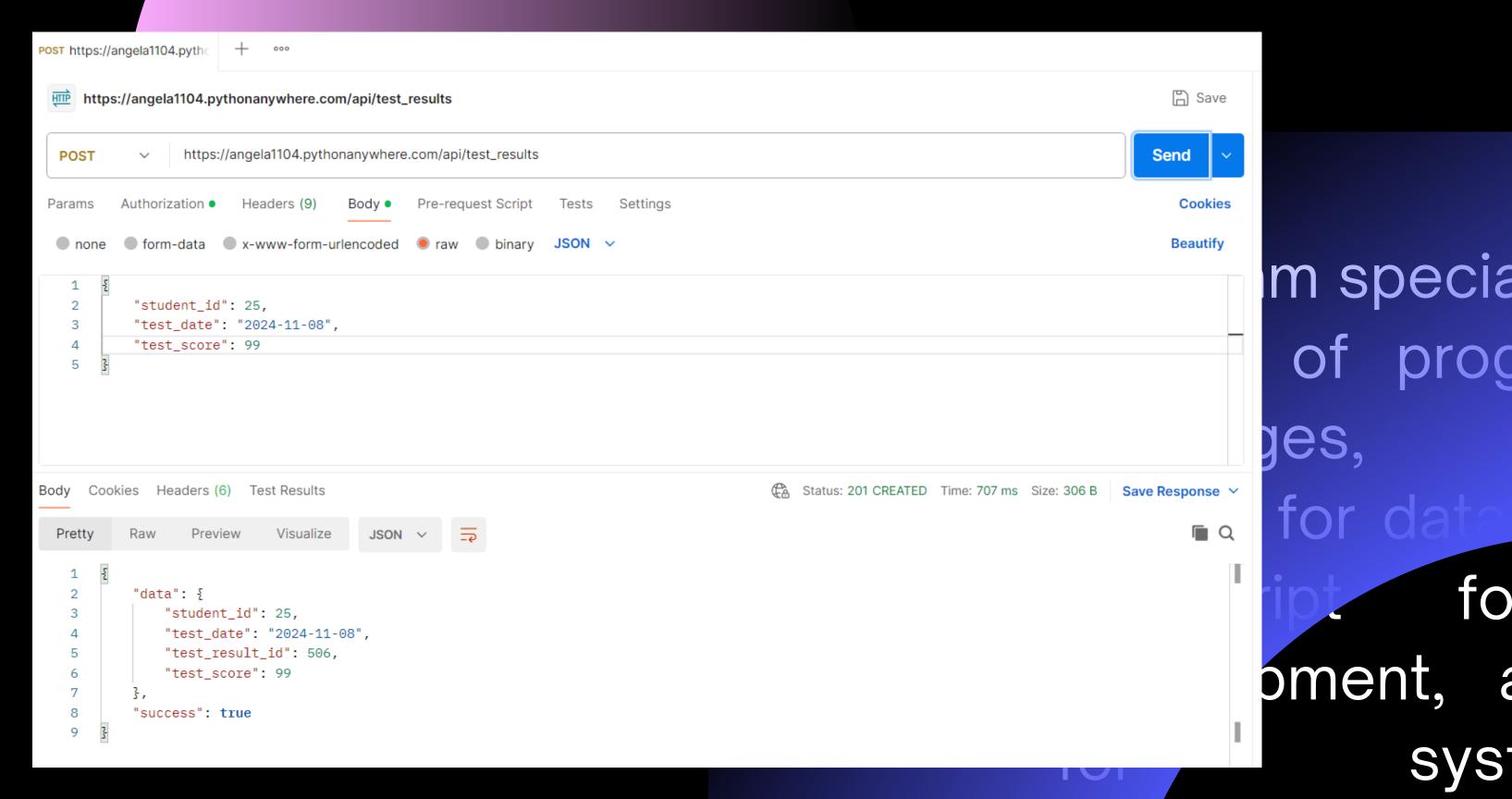assessment to protect
secure applications.

TEST_RESULTS TABLE

GET https://angela1104.pythor

https://angela1104.pythonanywhere.com/api/test_results
💾 Save

GET ⌄ | https://angela1104.pythonanywhere.com/api/test_results | Send ⌄

Params Authorization ● Headers (7) Body Pre-request Script Tests Settings   Cookies

⚪ none ⚪ form-data ⚪ x-www-form-urlencoded 🔴 raw ⚪ binary JSON ⌄   Beautify

```
1
```

Body Cookies Headers (8) Test Results   🌐 Status: 200 OK Time: 1069 ms Size: 771 B Save Response ⌄

Pretty Raw Preview Visualize JSON ⌄ ⇄

```
 1  {
 2      "data": [
 3          {
 4              "student_id": 25,
 5              "test_date": "Tue, 06 Aug 2024 00:00:00 GMT",
 6              "test_result_id": 80,
 7              "test_score": "94.00"
 8          },
 9          {
10              "student_id": 25,
11              "test_date": "Sun, 27 Oct 2024 00:00:00 GMT",
12              "test_result_id": 81,
13              "test_score": "89.00"
14          },
```

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GET https://python...

https://angela1104.pythonanywhere.com/api/test_results/80

Save

GET

https://angela1104.pythonanywhere.com/api/test_results/80

Send

Params   Authorization ●   Headers (7)   Body   Pre-request Script   Tests   Settings

Cookies

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

Beautify

1

Body   Cookies   Headers (6)   Test Results   Status: 200 OK   Time: 348 ms   Size: 324 B   Save Response

Pretty   Raw   Preview   Visualize   JSON

```
1  {
2      "data": {
3          "student_id": 25,
4          "test_date": "Tue, 06 Aug 2024 00:00:00 GMT",
5          "test_result_id": 80,
6          "test_score": "94.00"
7      },
8      "success": true
9  }
```

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Core
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Core
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PUT https://angela1104.pythor

https://angela1104.pythonanywhere.com/api/test_results/506

Save

PUT https://angela1104.pythonanywhere.com/api/test_results/506

Send

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

Cookies

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

Beautify

```
1  {
2      "student_id": 25,
3      "test_date": "2025-11-08",
4      "test_score": 99
5  }
```

Body Cookies Headers (6) Test Results

Status: 200 OK Time: 343 ms Size: 258 B Save Response ∨

Pretty Raw Preview Visualize JSON ∨

```
1  {
2      "message": "Test result updated successfully",
3      "success": true
4  }
```

Core
Programming

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DEL https://angela1104.python

https://angela1104.pythonanywhere.com/api/test_results/506

Save

DELETE   https://angela1104.pythonanywhere.com/api/test_results/506   Send

Params   Authorization ●   Headers (7)   Body   Pre-request Script   Tests   Settings   Cookies

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON ∨   Beautify

```
1
```

Body   Cookies   Headers (6)   Test Results   Status: 200 OK   Time: 664 ms   Size: 266 B   Save Response ∨

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  {
2      "message": "Test result with ID 506 has been deleted",
3      "success": true
4  }
```
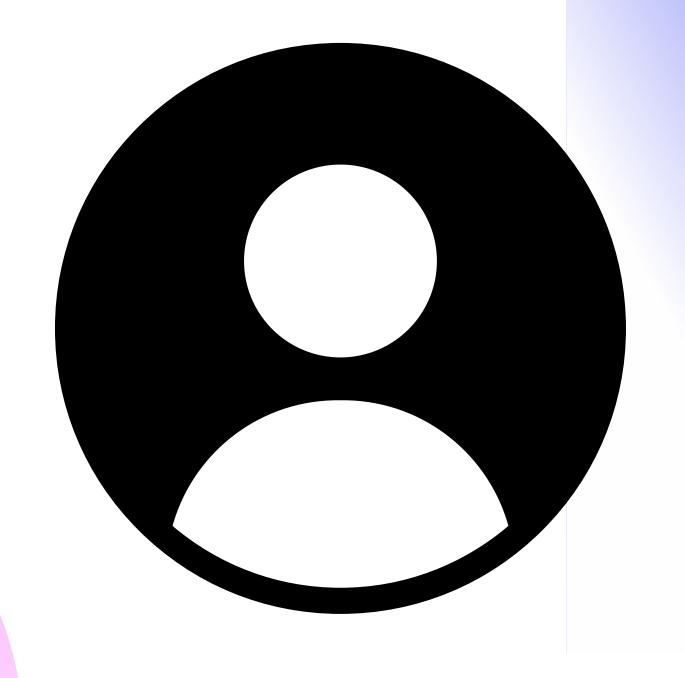
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Core
Programming
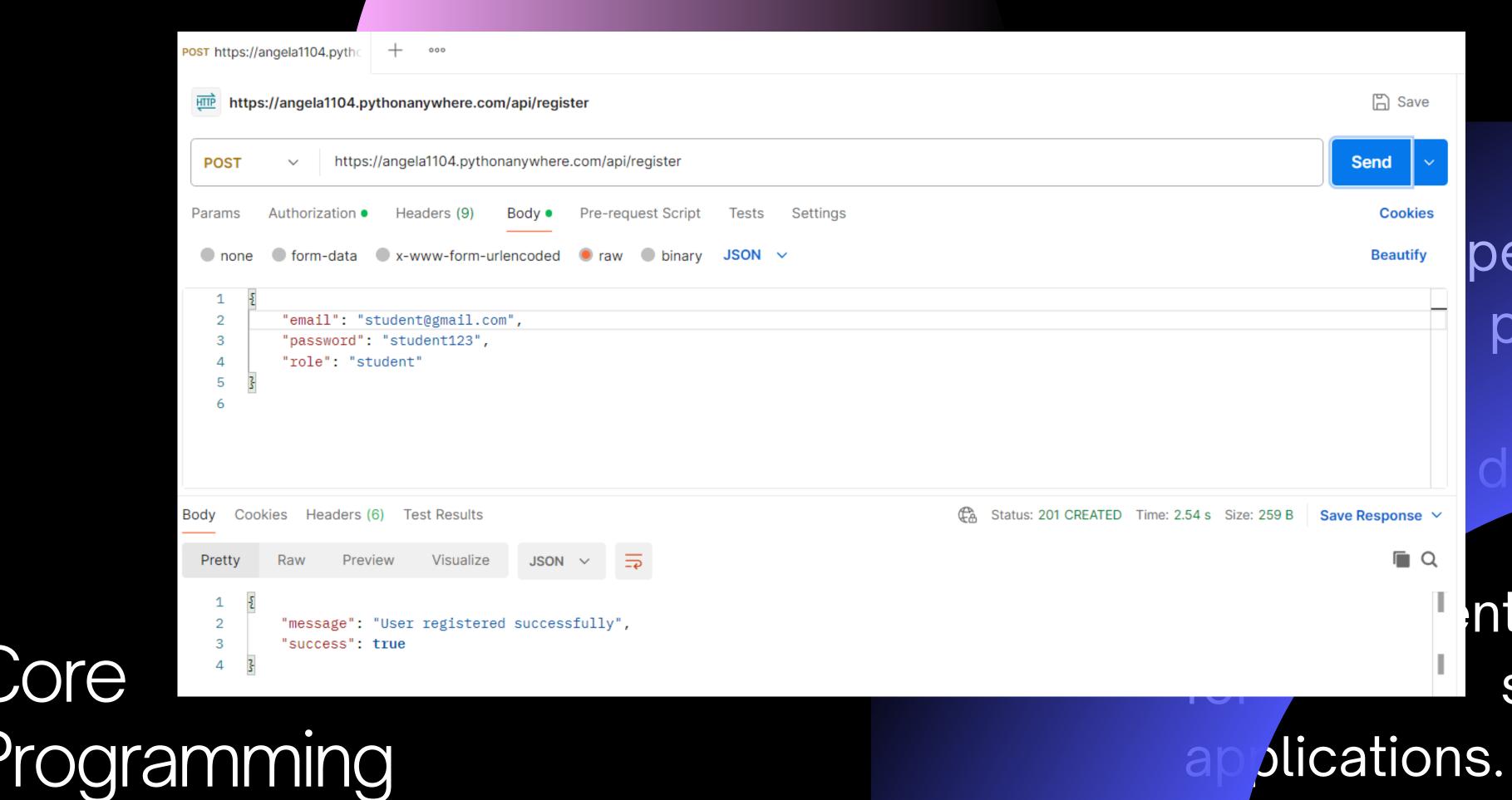
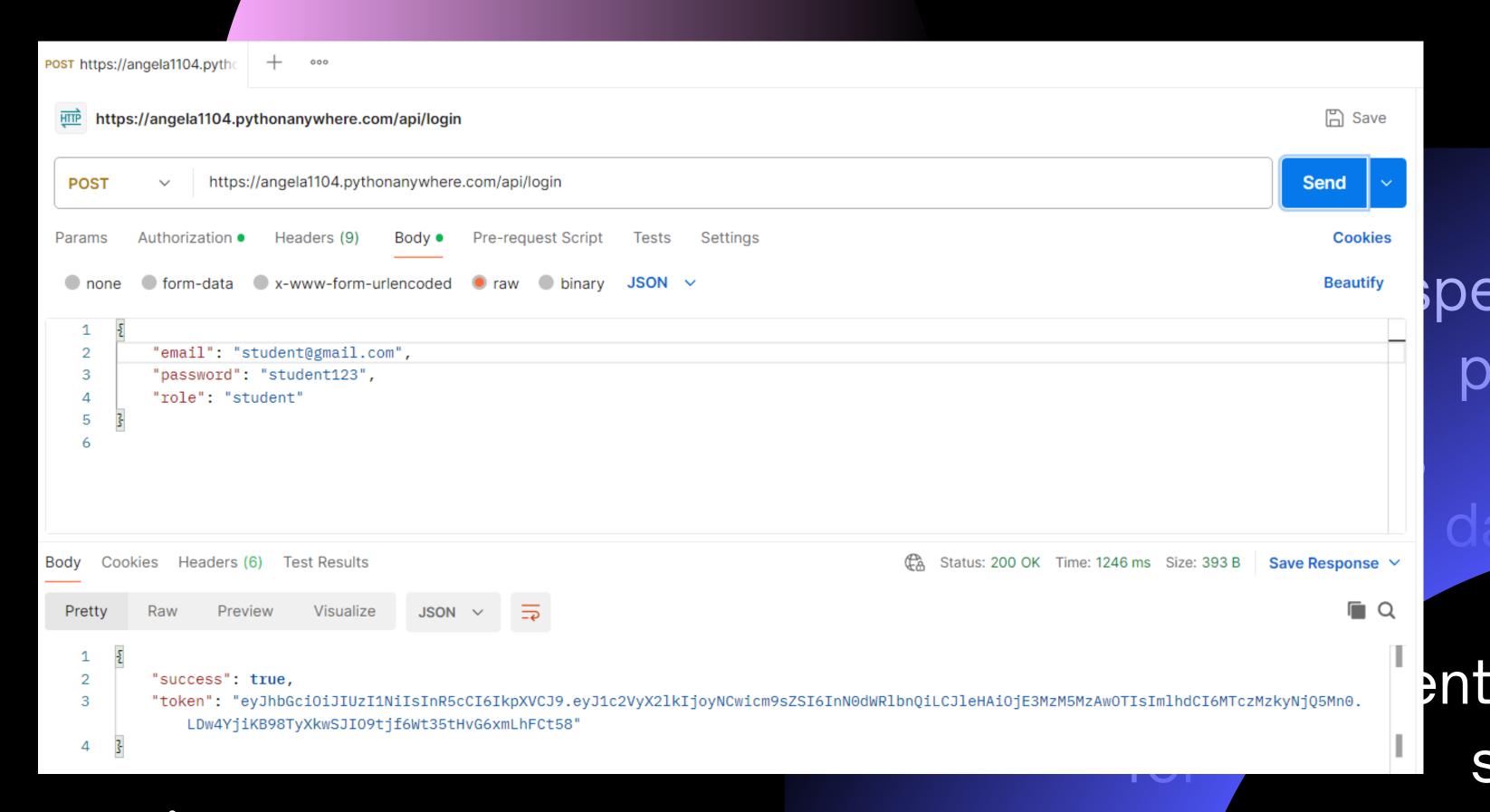Security is essential to
Our programmers follow
encryption, authenticatio
assessment to protect
secure applications.

STUDENTS

POST https://angela1104.pytho

https://angela1104.pythonanywhere.com/api/register

💾 Save

POST https://angela1104.pythonanywhere.com/api/register   Send

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON ∨   Beautify

```
1  {
2      "email": "student@gmail.com",
3      "password": "student123",
4      "role": "student"
5  }
6
```

Body   Cookies   Headers (6)   Test Results   Status: 201 CREATED   Time: 2.54 s   Size: 259 B   Save Response ∨

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  {
2      "message": "User registered successfully",
3      "success": true
4  }
```

Core

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POST https://pytho

https://angela1104.pythonanywhere.com/api/login

Save

POST https://angela1104.pythonanywhere.com/api/login

Send

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

Cookies

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary JSON ∨

Beautify

```
1  {
2      "email": "student@gmail.com",
3      "password": "student123",
4      "role": "student"
5  }
6
```

Body Cookies Headers (6) Test Results

Status: 200 OK Time: 1246 ms Size: 393 B Save Response ∨

Pretty Raw Preview Visualize JSON ∨

```
1  {
2      "success": true,
3      "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX2lkIjoyNCwicm9sZSI6InN0dWRlbnQiLCJleHAiOjE3MzM5MzAwOTIsImlhdCI6MTczMzkyNjQ5Mn0.
        LDw4YjiKB98TyXkwSJIO9tjf6Wt35tHvG6xmLhFCt58"
4  }
```
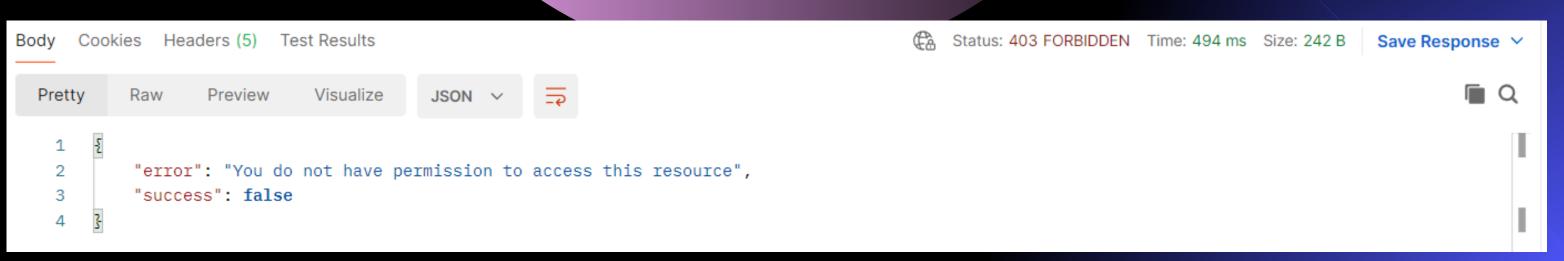
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Core

Programming

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Only the GET method students can access.

POST, PUT, and DELETE

| Body | Cookies | Headers (5) | Test Results | | Status: **403 FORBIDDEN** | Time: **494 ms** | Size: 242 B | **Save Response** ∨ |

| Pretty | Raw | Preview | Visualize | JSON ∨ |

```
1  {
2      "error": "You do not have permission to access this resource",
3      "success": false
4  }
```

Thank You