

The screenshot shows a Visual Studio Code editor with a file named `Estudiantes.py` open. The code is a Flask application that defines a list of students and provides three endpoints: `/estudiantes` (GET), `/estudiantes/numero_control` (GET), and `/estudiantes` (POST). The terminal at the bottom shows the output of the application running on `127.0.0.1:5000`, displaying the list of students and the response for a specific `numero_control`.

```

1  # coding: utf-8
2  """
3  Autor: Daniel Duarte Velázquez
4  Fecha: 07-08-2023
5  Descripción: Flask
6  """
7  from flask import Flask, jsonify, request
8  app = Flask(__name__)
9  students = [
10     {'numero_control': 1220100603, 'nombre': 'ANZO AVALOS MARIA CITLALLI'},
11     {'numero_control': 1220100624, 'nombre': 'ABREDOONDO GONZALEZ DANIEL ENRIQUE'},
12     {'numero_control': 1220100317, 'nombre': 'DUARTE VELAZQUEZ DANIEL'},
13     {'numero_control': 1220100629, 'nombre': 'GUTIERREZ MARTINEZ VALERIA IVONNE'},
14     {'numero_control': 1220100632, 'nombre': 'LUNA CANTERO ANGEL IVAN'},
15     {'numero_control': 1220100209, 'nombre': 'MARTINEZ RAMIREZ GUADALUPE MONSERAT'},
16     {'numero_control': 1220100053, 'nombre': 'REYES MORALES SALVADOR'},
17     {'numero_control': 1220100597, 'nombre': 'SALAZAR LEON MARIA GUADALUPE'},
18     {'numero_control': 1220100596, 'nombre': 'TADAO MARTINEZ ALEJANDRO'},
19     {'numero_control': 1220100075, 'nombre': 'TORRES GARCIA JOSE ROSELIO'},
20     {'numero_control': 1220100595, 'nombre': 'TRANQUERO HERNANDEZ OSCAR ARMANDO'}
21 ]
22
23 @app.get('/estudiantes')
24 def get_estudiantes():
25     return jsonify(students), 200
26
27 @app.get('/estudiantes/numero_control')
28 def get_estudiantes_id(numero_control):
29     for i in students:
30         if i['numero_control'] == int(numero_control):
31             return jsonify(i)
32     return {'error': 'Este usuario no se encuentra registrado'}, 202
33
34 @app.post('/estudiantes')
35 def add_estudiantes():
36     datos = request.get_json()
37     students.append(datos)
38     return {'success': 'Registro agregado con éxito'}, 201
39
40 if __name__ == '__main__':
41     app.run(debug=True)

```

The terminal output shows the following requests and responses:

```

127.0.0.1 - - [07/Aug/2023 22:31:34] "GET /estudiantes HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2023 22:31:43] "GET /estudiantes/1220100317 HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2023 22:31:47] "GET /estudiantes/ HTTP/1.1" 404 -
127.0.0.1 - - [07/Aug/2023 22:31:50] "GET /estudiantes HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2023 22:35:59] "GET /estudiantes HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2023 22:36:13] "GET /estudiantes/1220100317 HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2023 22:37:20] "POST /estudiantes HTTP/1.1" 201 -

```

The screenshot shows a web browser window displaying the JSON response of the `/estudiantes` endpoint. The response is a list of student objects, each containing a `numero_control` and a `nombre`.

```

{
  "nombre": "ANZO AVALOS MARIA CITLALLI",
  "numero_control": 1220100603
},
{
  "nombre": "ABREDOONDO GONZALEZ DANIEL ENRIQUE",
  "numero_control": 1220100624
},
{
  "nombre": "DUARTE VELAZQUEZ DANIEL",
  "numero_control": 1220100317
},
{
  "nombre": "GUTIERREZ MARTINEZ VALERIA IVONNE",
  "numero_control": 1220100629
},
{
  "nombre": "LUNA CANTERO ANGEL IVAN",
  "numero_control": 1220100632
},
{
  "nombre": "MARTINEZ RAMIREZ GUADALUPE MONSERAT",
  "numero_control": 1220100209
},
{
  "nombre": "REYES MORALES SALVADOR",
  "numero_control": 1220100053
},
{
  "nombre": "SALAZAR LEON MARIA GUADALUPE",
  "numero_control": 1220100597
},
{
  "nombre": "TADAO MARTINEZ ALEJANDRO",
  "numero_control": 1220100596
},
{
  "nombre": "TORRES GARCIA JOSE ROSELIO",
  "numero_control": 1220100075
},
{
  "nombre": "TRANQUERO HERNANDEZ OSCAR ARMANDO",
  "numero_control": 1220100595
}

```

```
Document from Nosi x Curso DH-Automatiz... x REST API con Flask - C x como ejecutar un arc... x Python and Flask Tut... x 127.0.0.1:5000/estudi... x Download Postman | x Postman - Browser E... x practicas-git-redes/U... x + - x x
127.0.0.1:5000/estudiantes/1220100317
{
  "nombre": "DUARTE VELAZQUEZ DANIEL",
  "numero_control": 1220100317
}
```

```
Postman-win64-Se...exe students (1).py students.py Mostrar todo x
10:43 p.m. 07/08/2023
Document from Nosi x Curso DH-Automatiz... x REST API con Flask - C x como ejecutar un arc... x Python and Flask Tut... x 127.0.0.1:5000/estudi... x Download Postman | x Postman - Browser E... x practicas-git-redes/U... x + - x x
127.0.0.1:5000/estudiantes/1220100318
{
  "error": "Este usuario no se encuentra registrado"
}
```

```
Postman-win64-Se...exe students (1).py students.py Mostrar todo x
10:44 p.m. 07/08/2023
```

Postman interface showing a GET request to `http://127.0.0.1:5000/estudiantes`. The response body is a JSON array of student records.

**Request:** GET `http://127.0.0.1:5000/estudiantes`

**Query Params:**

Key	Value	Description
Key	Value	Description

**Response Body (JSON):**

```
1 [
2   {
3     "nombre": "ANZO AVALOS MARIA CITLALLI",
4     "numero_control": 1228186603
5   },
6   {
7     "nombre": "ARREDONDO GONZALEZ DANIEL ENRIQUE",
8     "numero_control": 1219188624
9   },
10  {
11    "nombre": "DUARTE VELAZQUEZ DANIEL",
12    "numero_control": 1228186317
13  },
14  {
15    "nombre": "GUTIERREZ MARTINEZ VALERIA IVONNE",
16    "numero_control": 1228186629
17  },
18  ]
```

Status: 200 OK Time: 13 ms Size: 131 KB

Postman interface showing a GET request to `http://127.0.0.1:5000/estudiantes/1220100317`. The response body is a JSON object representing a single student record.

**Request:** GET `http://127.0.0.1:5000/estudiantes/1220100317`

**Query Params:**

Key	Value	Description
Key	Value	Description

**Response Body (JSON):**

```
1 {
2   "nombre": "DUARTE VELAZQUEZ DANIEL",
3   "numero_control": 1228186317
4 }
```

Status: 200 OK Time: 5 ms Size: 239 B

Postman interface showing a REST client request configuration for a POST endpoint.

**My Workspace** | New | Import | Overview | GET Estudiantes | GET FIND\_ESTUDIANTE | POST Add\_Estudiante | +

**Automatización / Add\_Estudiante** | Save | Send

**POST** | <http://127.0.0.1:5000/estudiantes>

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

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

```
1 {
2   "nombre": "Luis Arturo Mata ",
3   "numero_control": 1220100003
4 }
```

Body | Cookies | Headers (5) | Test Results

Pretty | Raw | Preview | Visualize | JSON | Save as Example

```
1 {
2   "success": "Registro agregado con exito"
3 }
```

Status: 201 CREATED | Time: 6 ms | Size: 217 B

10:40 p.m. 07/09/2023