Novibet Interview Assignment EXPRESSYOURSELF–READ.ME

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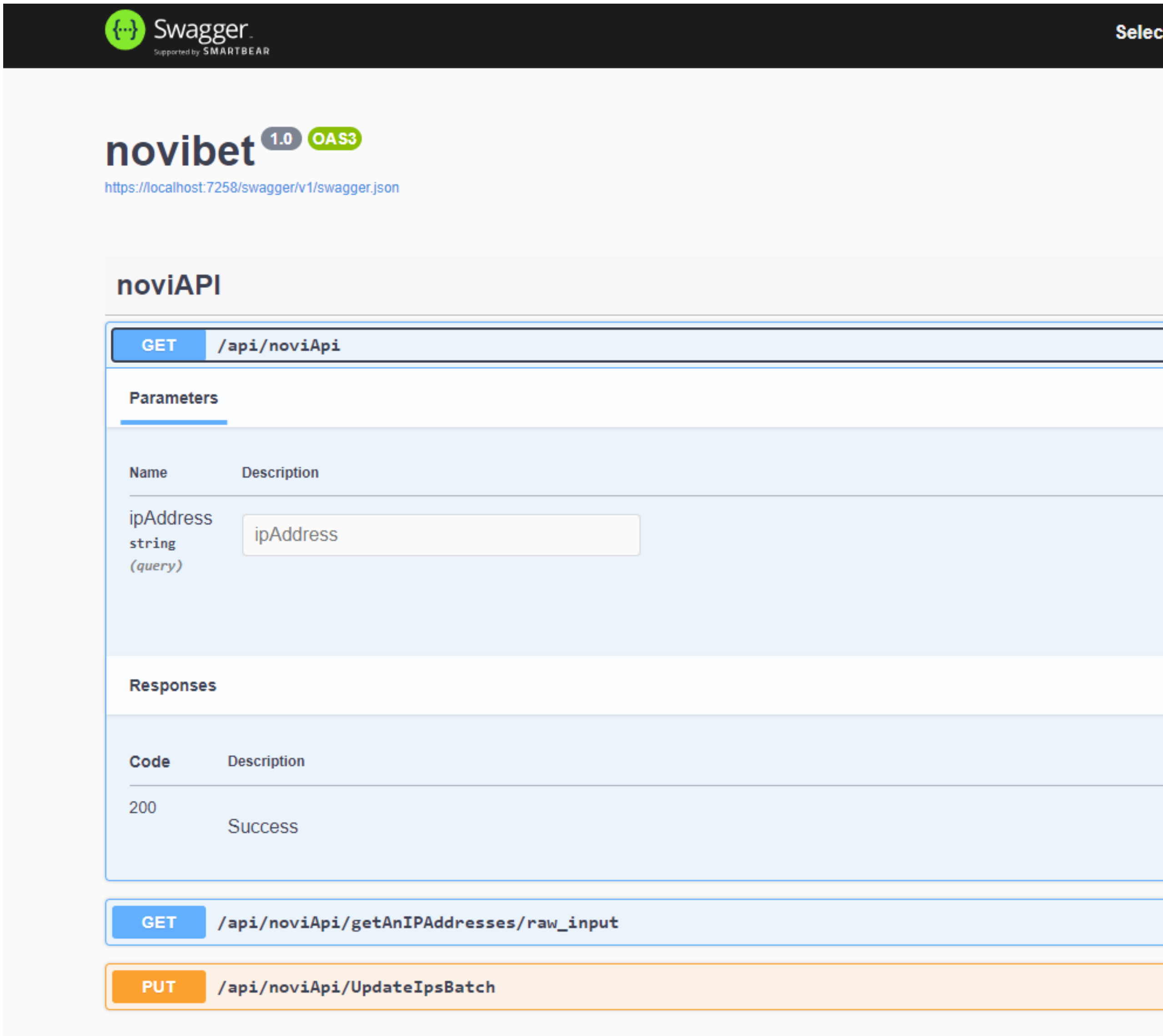
1 REPORT

HERE ARE SHOWN CASES THAT COULD HAVE BEEN HANDLED/DEVELOPED BETTER BUT DIDN'T, because I judged that this project was in good shape to be delivered, always respecting both yours and my time (i'm currently in middle of uni exams)-G.Bakas.
0-I implemented the database using SQLite 1- When changes are made manually in the database and they are not written (saved) then the response is an error indicating that the database is locked!
2- Second task asked that in a null input (just execute) the return should be all the available countries with the number of IPs they have. Currently (24.09.24-20:08) this featured is not available. I don't know if it will be available when I deliver, but i really hope so.
3-Lack of proper documentation and error handling. The errors that get returned could have been specific-er and analysed more.
4-I never filled the database with more than 20 IPs simultaneously so I wouldn't know if the Update by batches works. I only updated 1 batch every time, since the number of total IPs was smaller than 101.

2 TASK 1: Retrieve country info

Here a detailed explanation of the SWagger input and output in the first is being shown.
The input should be a string type Ip and the result the two, three lettercode and name of the country to which the ip belongs.



novibet 1.0 OAS3

https://localhost:7258/swagger/v1/swagger.json

noviAPI

GET /api/noviApi

Parameters

Name	Description
ipAddress string *(query)*	ipAddress

Responses

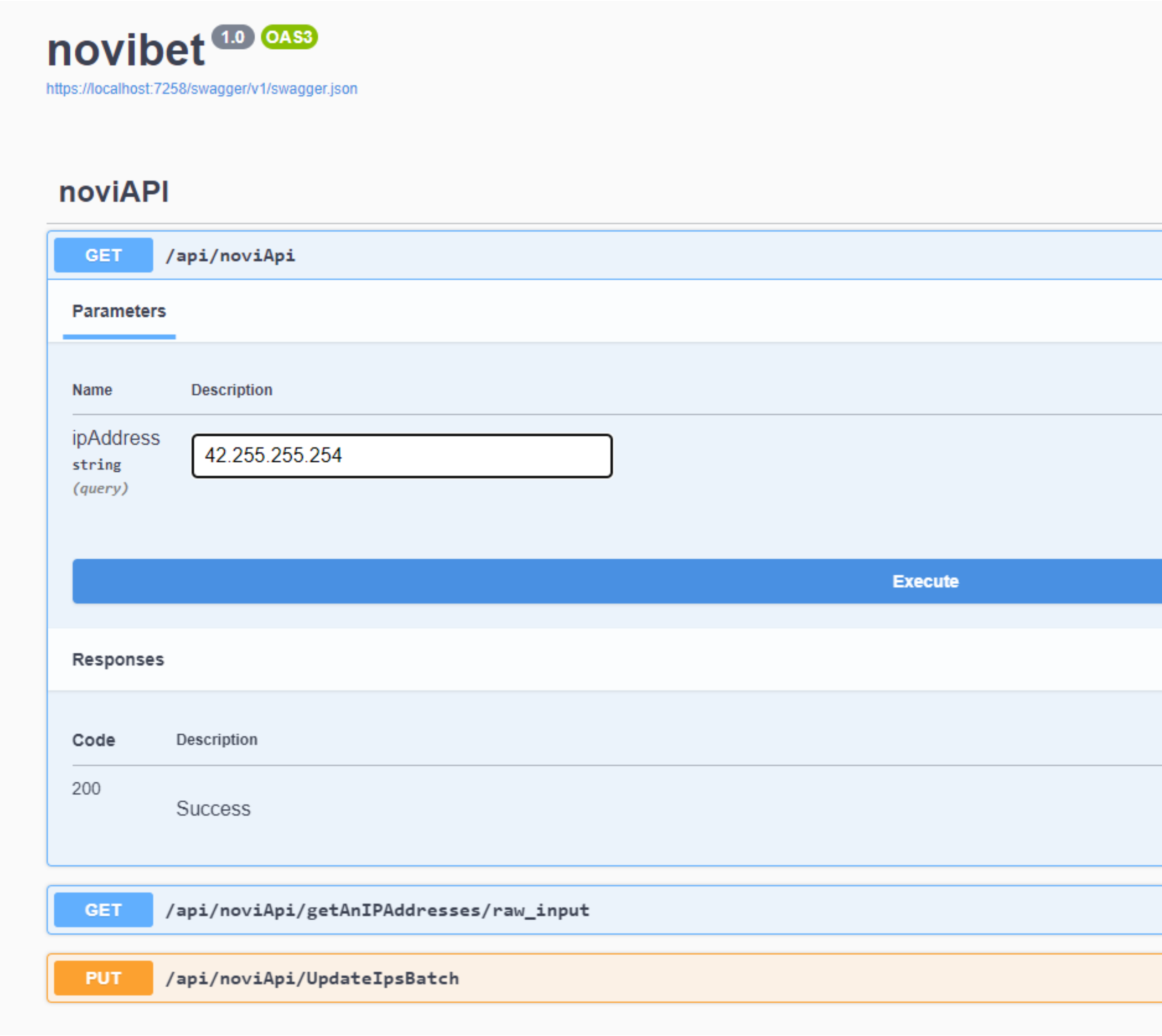
Code	Description
200	Success

GET /api/noviApi/getAnIPAddresses/raw_input

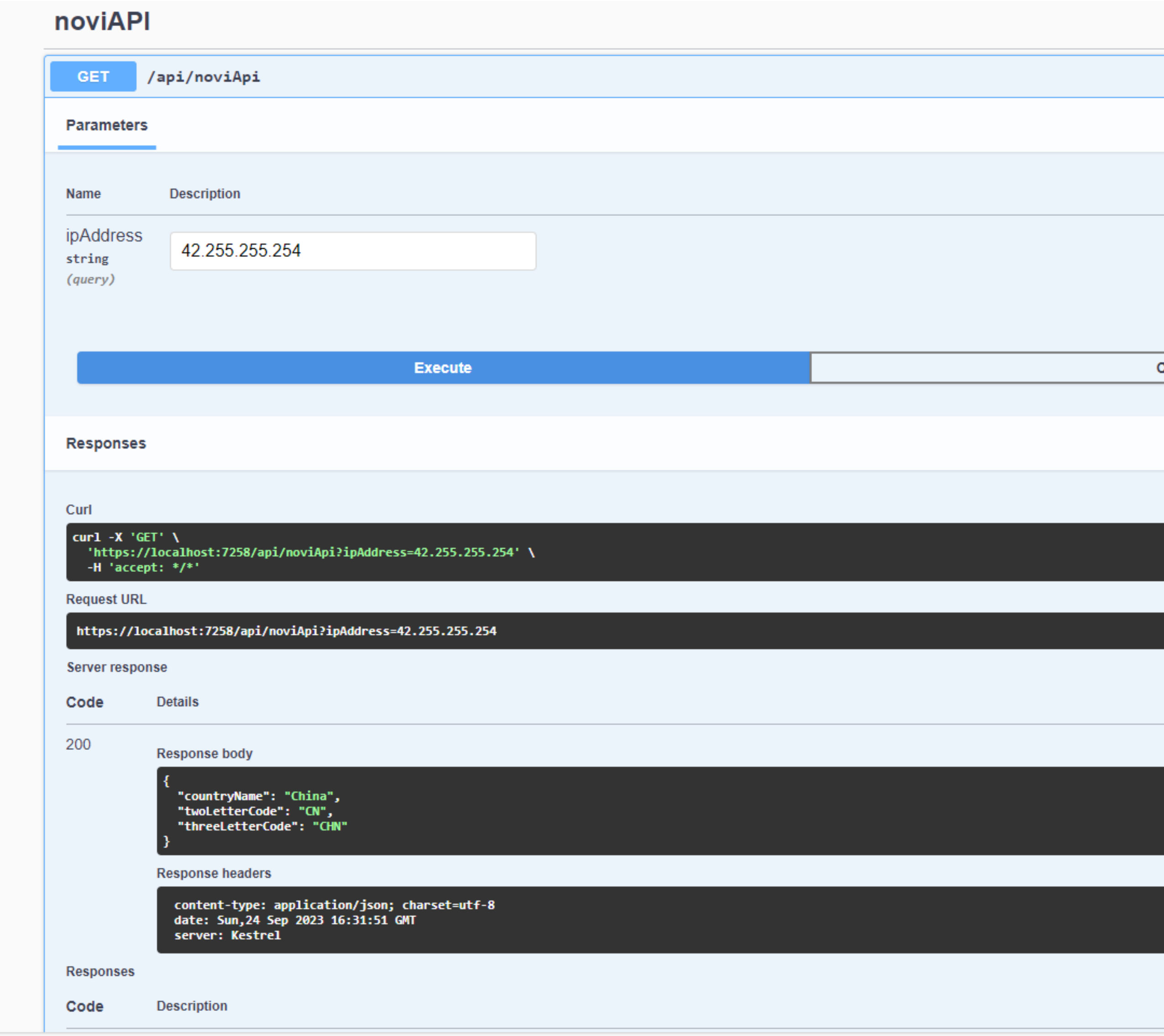
PUT /api/noviApi/UpdateIpsBatch

Entering an already existing Ip as Input shall return the data with-

out changing the database.
We enter the Ip:'42.255.255.254' shown in the IPAddresses table which belongs to Country:'CHINA'.



After EXECUTE:



ipAddress
string
(query)
42.255.255.254

```
curl -X 'GET' \
  'https://localhost:7258/api/noviApi?ipAddress=42.255.255.254' \
  -H 'accept: */*'
```

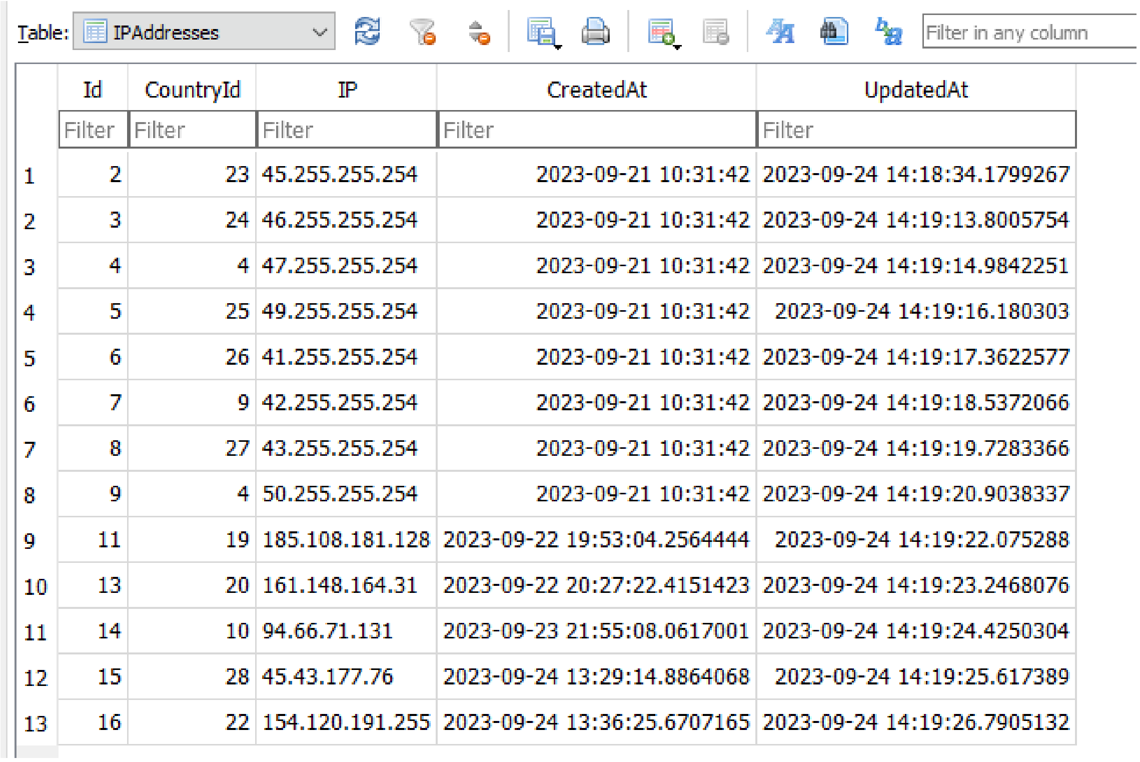
```
https://localhost:7258/api/noviApi?ipAddress=42.255.255.254
```

200

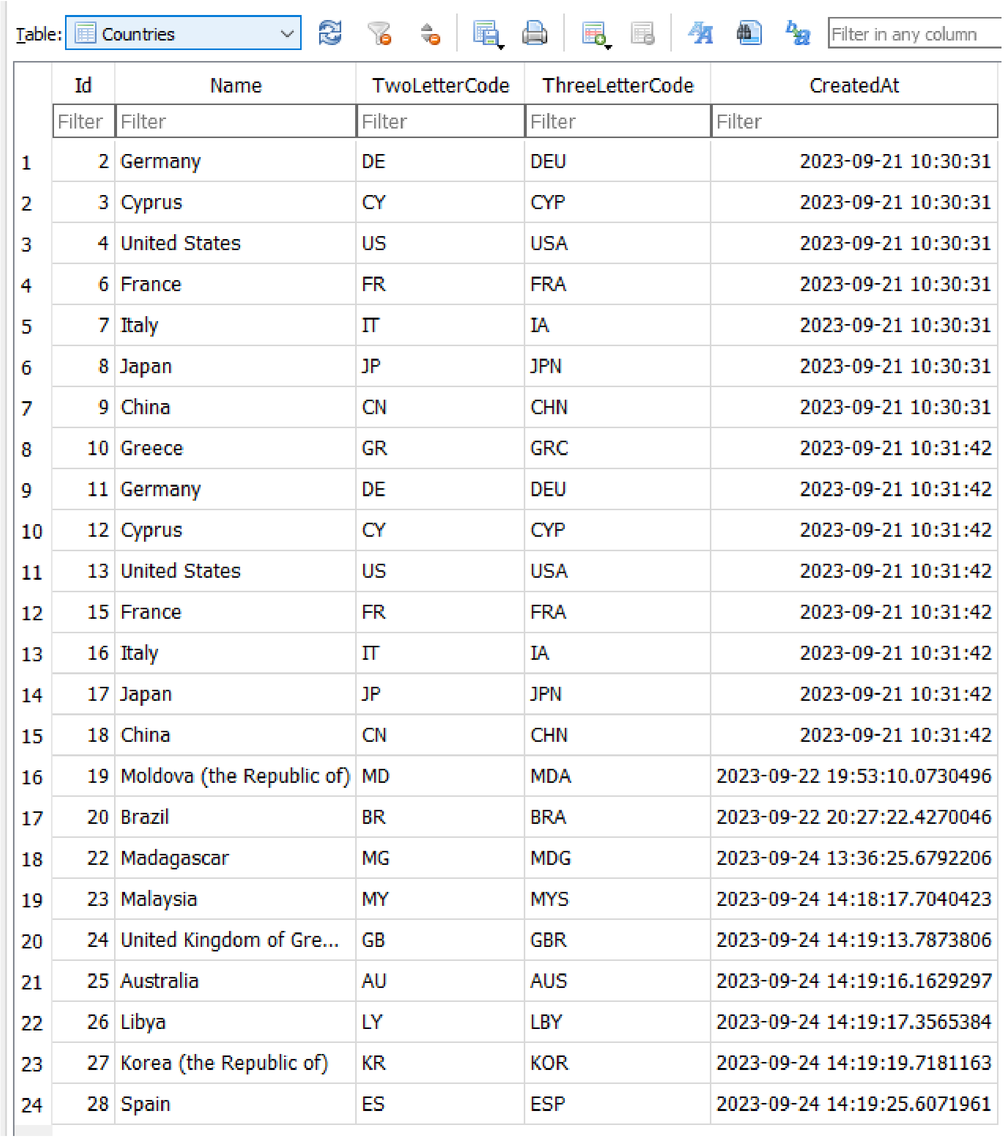
```
{
  "countryName": "China",
  "twoLetterCode": "CN",
  "threeLetterCode": "CHN"
}
```

```
 content-type: application/json; charset=utf-8
 date: Sun,24 Sep 2023 16:31:51 GMT
 server: Kestrel
```

Now running the task with an Ip not stored in the database. Here a new Irish Ip:'52.169.167.255' is inserted. The two following pictures show the absence of the ip in the IPAddresses table and the absence of the country Ireland from the Countries table.

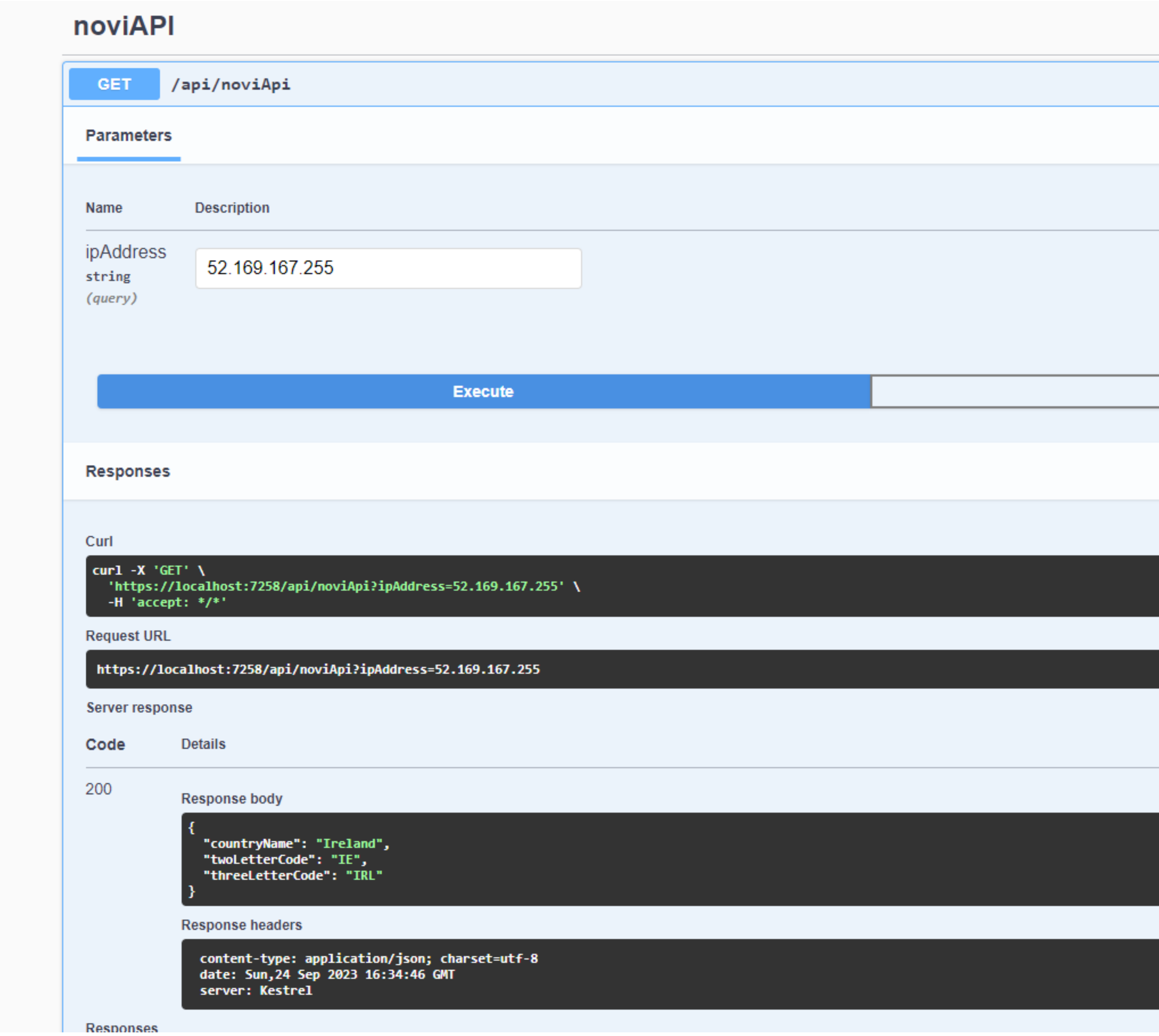


	Id	CountryId	IP	CreatedAt	UpdatedAt
	Filter	Filter	Filter	Filter	Filter
1	2	23	45.255.255.254	2023-09-21 10:31:42	2023-09-24 14:18:34.1799267
2	3	24	46.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:13.8005754
3	4	4	47.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:14.9842251
4	5	25	49.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:16.180303
5	6	26	41.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:17.3622577
6	7	9	42.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:18.5372066
7	8	27	43.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:19.7283366
8	9	4	50.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:20.9038337
9	11	19	185.108.181.128	2023-09-22 19:53:04.2564444	2023-09-24 14:19:22.075288
10	13	20	161.148.164.31	2023-09-22 20:27:22.4151423	2023-09-24 14:19:23.2468076
11	14	10	94.66.71.131	2023-09-23 21:55:08.0617001	2023-09-24 14:19:24.4250304
12	15	28	45.43.177.76	2023-09-24 13:29:14.8864068	2023-09-24 14:19:25.617389
13	16	22	154.120.191.255	2023-09-24 13:36:25.6707165	2023-09-24 14:19:26.7905132



	Id	Name	TwoLetterCode	ThreeLetterCode	CreatedAt
	Filter	Filter	Filter	Filter	Filter
1	2	Germany	DE	DEU	2023-09-21 10:30:31
2	3	Cyprus	CY	CYP	2023-09-21 10:30:31
3	4	United States	US	USA	2023-09-21 10:30:31
4	6	France	FR	FRA	2023-09-21 10:30:31
5	7	Italy	IT	IA	2023-09-21 10:30:31
6	8	Japan	JP	JPN	2023-09-21 10:30:31
7	9	China	CN	CHN	2023-09-21 10:30:31
8	10	Greece	GR	GRC	2023-09-21 10:31:42
9	11	Germany	DE	DEU	2023-09-21 10:31:42
10	12	Cyprus	CY	CYP	2023-09-21 10:31:42
11	13	United States	US	USA	2023-09-21 10:31:42
12	15	France	FR	FRA	2023-09-21 10:31:42
13	16	Italy	IT	IA	2023-09-21 10:31:42
14	17	Japan	JP	JPN	2023-09-21 10:31:42
15	18	China	CN	CHN	2023-09-21 10:31:42
16	19	Moldova (the Republic of)	MD	MDA	2023-09-22 19:53:10.0730496
17	20	Brazil	BR	BRA	2023-09-22 20:27:22.4270046
18	22	Madagascar	MG	MDG	2023-09-24 13:36:25.6792206
19	23	Malaysia	MY	MYS	2023-09-24 14:18:17.7040423
20	24	United Kingdom of Gre...	GB	GBR	2023-09-24 14:19:13.7873806
21	25	Australia	AU	AUS	2023-09-24 14:19:16.1629297
22	26	Libya	LY	LBY	2023-09-24 14:19:17.3565384
23	27	Korea (the Republic of)	KR	KOR	2023-09-24 14:19:19.7181163
24	28	Spain	ES	ESP	2023-09-24 14:19:25.6071961

Hitting EXECUTE returns the following:



ipAddress
string
(query)

52.169.167.255

Curl

```
curl -X 'GET' \
  'https://localhost:7258/api/noviApi?ipAddress=52.169.167.255' \
  -H 'accept: */*'
```

Request URL

```
https://localhost:7258/api/noviApi?ipAddress=52.169.167.255
```

200

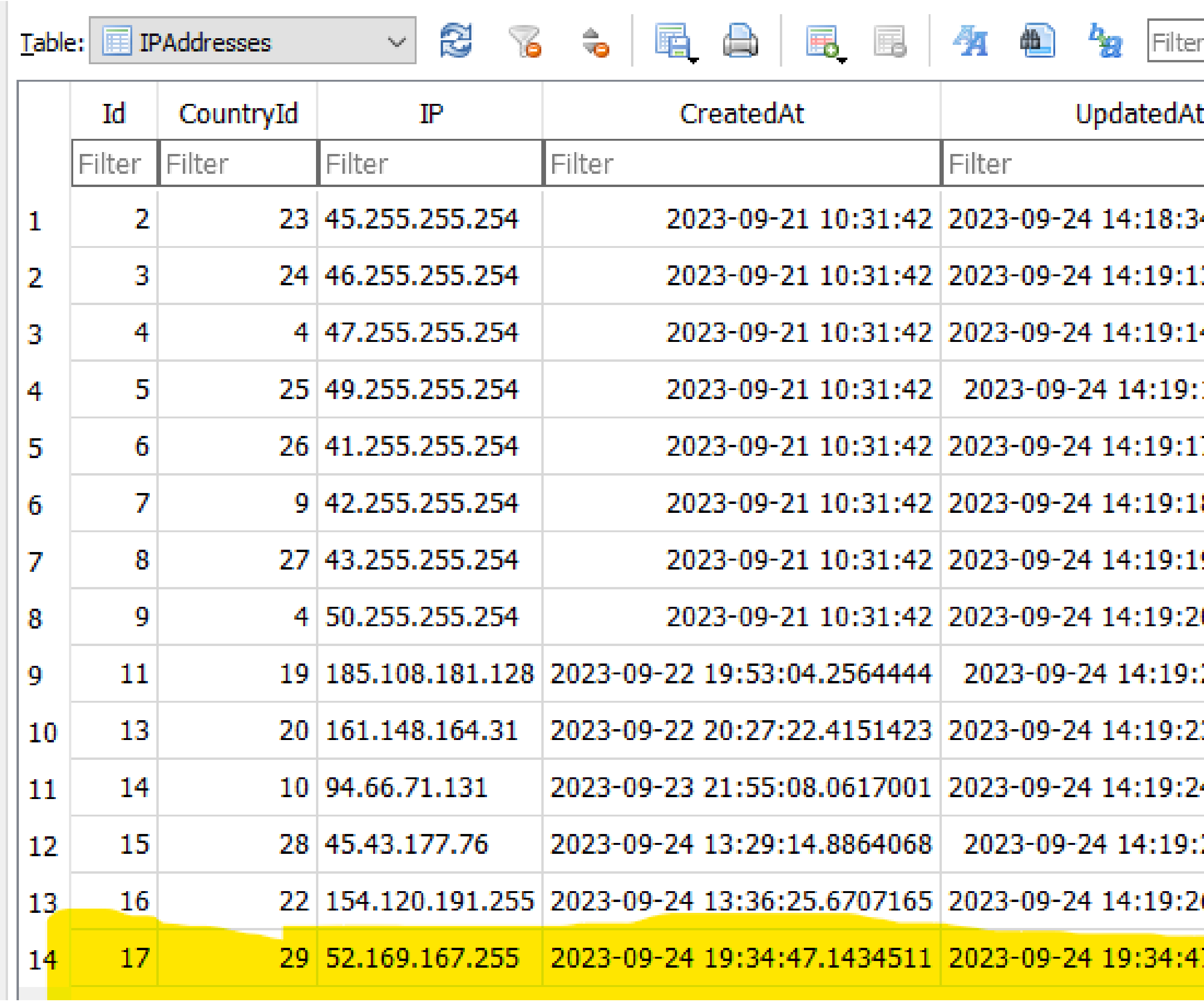
Response body

```
{
  "countryName": "Ireland",
  "twoLetterCode": "IE",
  "threeLetterCode": "IRL"
}
```

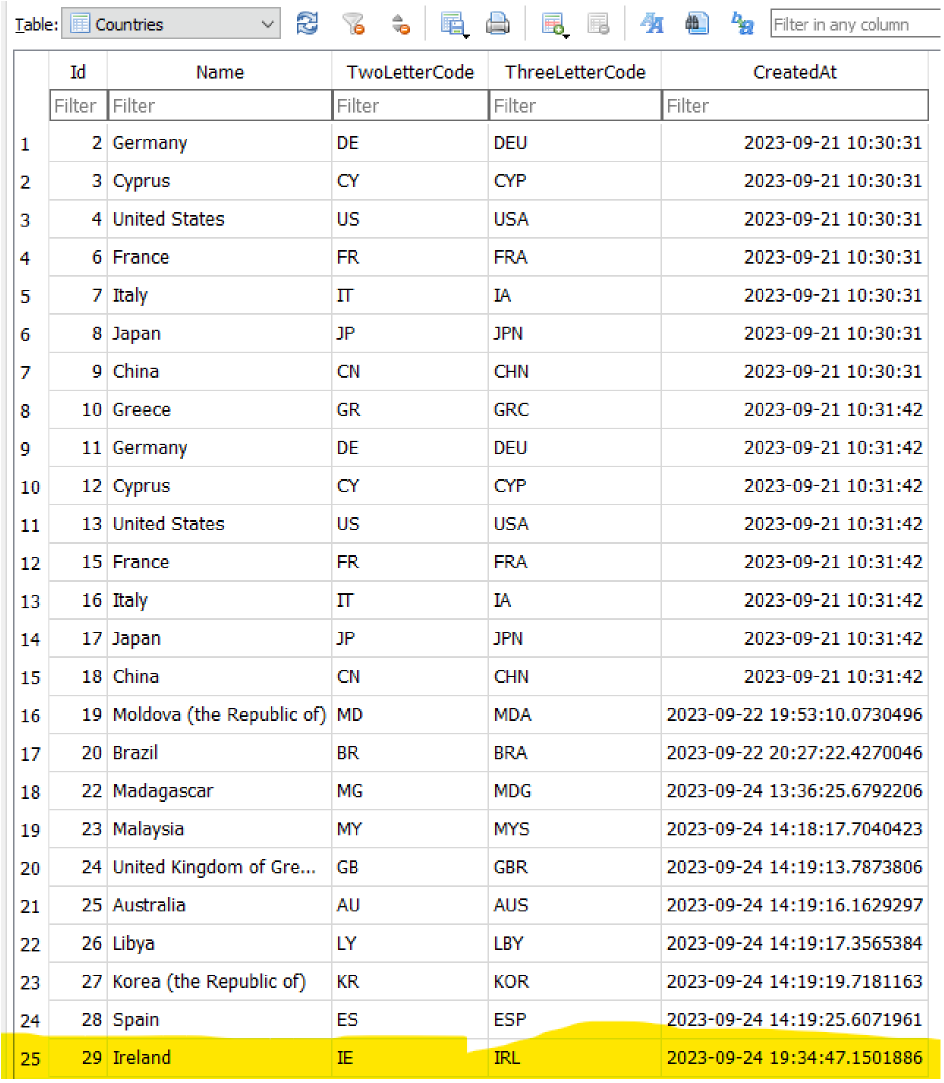
Response headers

```
 content-type: application/json; charset=utf-8
 date: Sun,24 Sep 2023 16:34:46 GMT
 server: Kestrel
```

And the databases tables are updated accordingly:



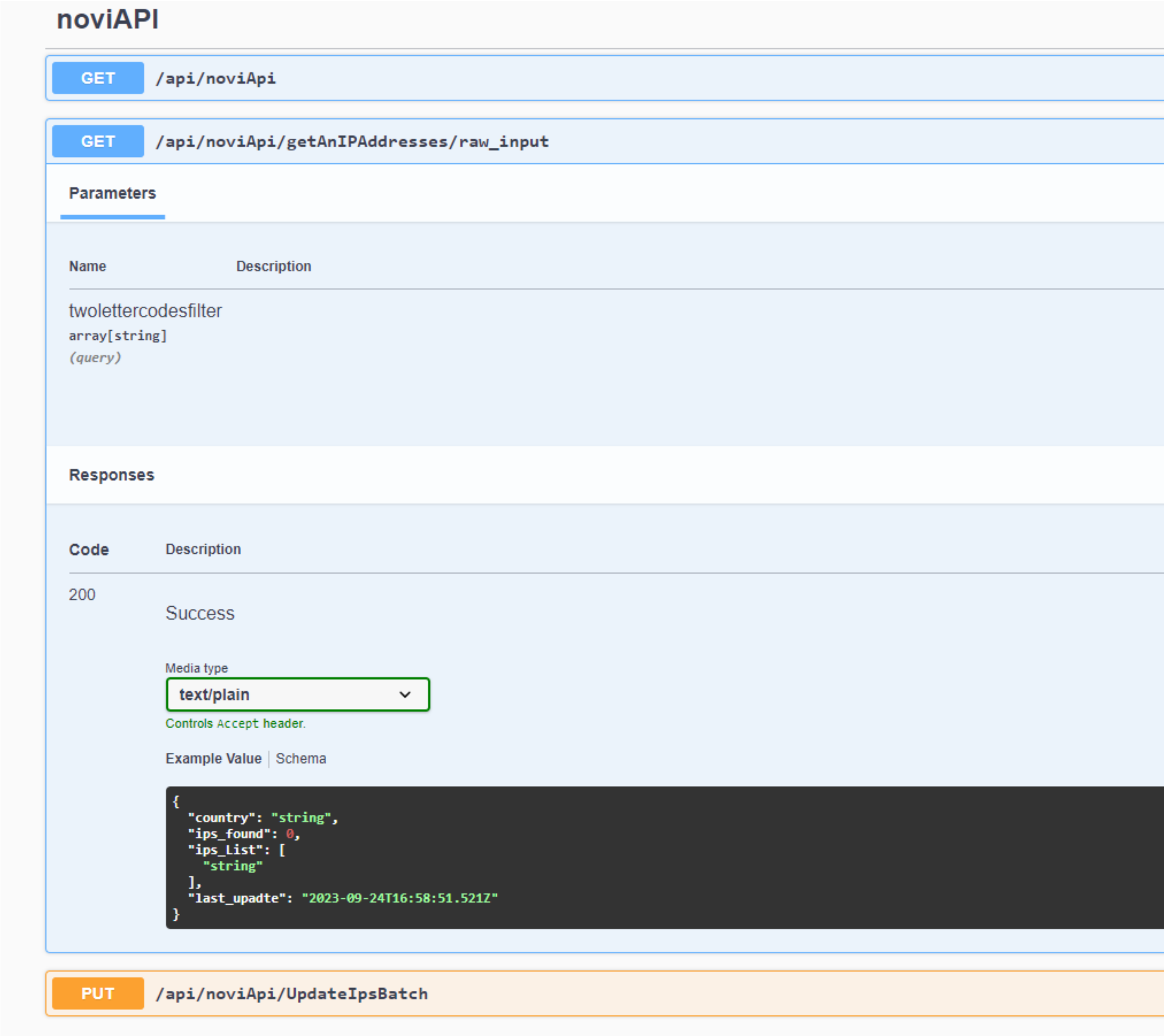
	Id	CountryId	IP	CreatedAt	UpdatedAt
	Filter	Filter	Filter	Filter	Filter
1	2	23	45.255.255.254	2023-09-21 10:31:42	2023-09-24 14:18:3
2	3	24	46.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:1
3	4	4	47.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:1
4	5	25	49.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:
5	6	26	41.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:1
6	7	9	42.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:1
7	8	27	43.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:1
8	9	4	50.255.255.254	2023-09-21 10:31:42	2023-09-24 14:19:2
9	11	19	185.108.181.128	2023-09-22 19:53:04.2564444	2023-09-24 14:19:
10	13	20	161.148.164.31	2023-09-22 20:27:22.4151423	2023-09-24 14:19:2
11	14	10	94.66.71.131	2023-09-23 21:55:08.0617001	2023-09-24 14:19:2
12	15	28	45.43.177.76	2023-09-24 13:29:14.8864068	2023-09-24 14:19:
13	16	22	154.120.191.255	2023-09-24 13:36:25.6707165	2023-09-24 14:19:2
14	17	29	52.169.167.255	2023-09-24 19:34:47.1434511	2023-09-24 19:34:4



	Id	Name	TwoLetterCode	ThreeLetterCode	CreatedAt
	Filter	Filter	Filter	Filter	Filter
1	2	Germany	DE	DEU	2023-09-21 10:30:31
2	3	Cyprus	CY	CYP	2023-09-21 10:30:31
3	4	United States	US	USA	2023-09-21 10:30:31
4	6	France	FR	FRA	2023-09-21 10:30:31
5	7	Italy	IT	IA	2023-09-21 10:30:31
6	8	Japan	JP	JPN	2023-09-21 10:30:31
7	9	China	CN	CHN	2023-09-21 10:30:31
8	10	Greece	GR	GRC	2023-09-21 10:31:42
9	11	Germany	DE	DEU	2023-09-21 10:31:42
10	12	Cyprus	CY	CYP	2023-09-21 10:31:42
11	13	United States	US	USA	2023-09-21 10:31:42
12	15	France	FR	FRA	2023-09-21 10:31:42
13	16	Italy	IT	IA	2023-09-21 10:31:42
14	17	Japan	JP	JPN	2023-09-21 10:31:42
15	18	China	CN	CHN	2023-09-21 10:31:42
16	19	Moldova (the Republic of)	MD	MDA	2023-09-22 19:53:10.0730496
17	20	Brazil	BR	BRA	2023-09-22 20:27:22.4270046
18	22	Madagascar	MG	MDG	2023-09-24 13:36:25.6792206
19	23	Malaysia	MY	MYS	2023-09-24 14:18:17.7040423
20	24	United Kingdom of Gre...	GB	GBR	2023-09-24 14:19:13.7873806
21	25	Australia	AU	AUS	2023-09-24 14:19:16.1629297
22	26	Libya	LY	LBY	2023-09-24 14:19:17.3565384
23	27	Korea (the Republic of)	KR	KOR	2023-09-24 14:19:19.7181163
24	28	Spain	ES	ESP	2023-09-24 14:19:25.6071961
25	29	Ireland	IE	IRL	2023-09-24 19:34:47.1501886

3 TASK 2: Retrieve Ips by Countries

Here a detailed explanation of the Swagger input and output in the second is being shown.
The input should be some string types two letter codes representing the countries and the result the num of Ips each country has, as well the last time any of the Ips that belong to the country got updated.



noviAPI

/api/noviApi

/api/noviApi/getAnIPAddresses/raw_input

Parameters

Name	Description
twolettercodesfilter array[string] *(query)*	

Responses

Code	Description
200	Success

Media type

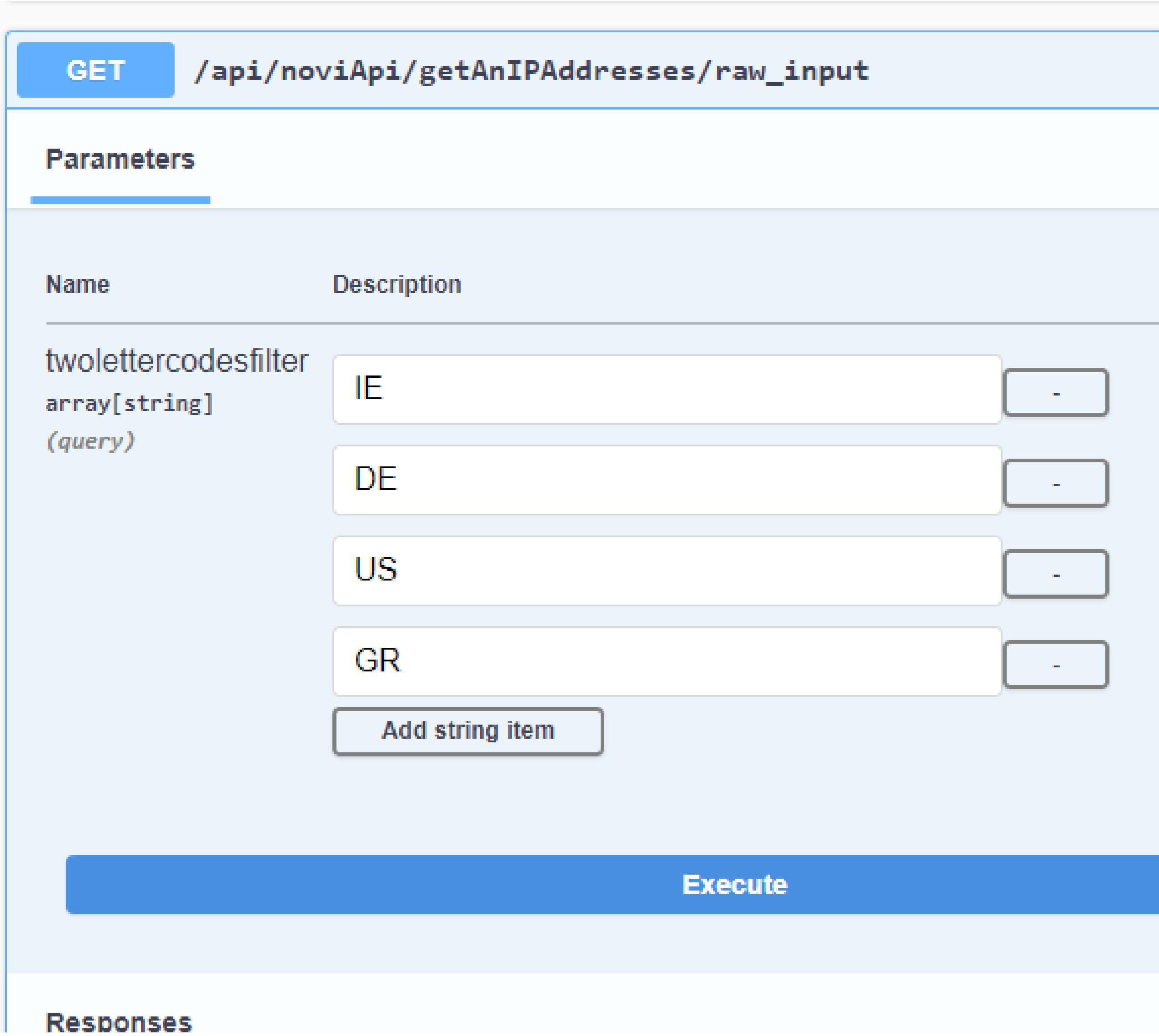
text/plain

Controls Accept header.

Example Value | Schema

```
{
  "country": "string",
  "ips_found": 0,
  "ips_List": [
    "string"
  ],
  "last_upadte": "2023-09-24T16:58:51.521Z"
}
```

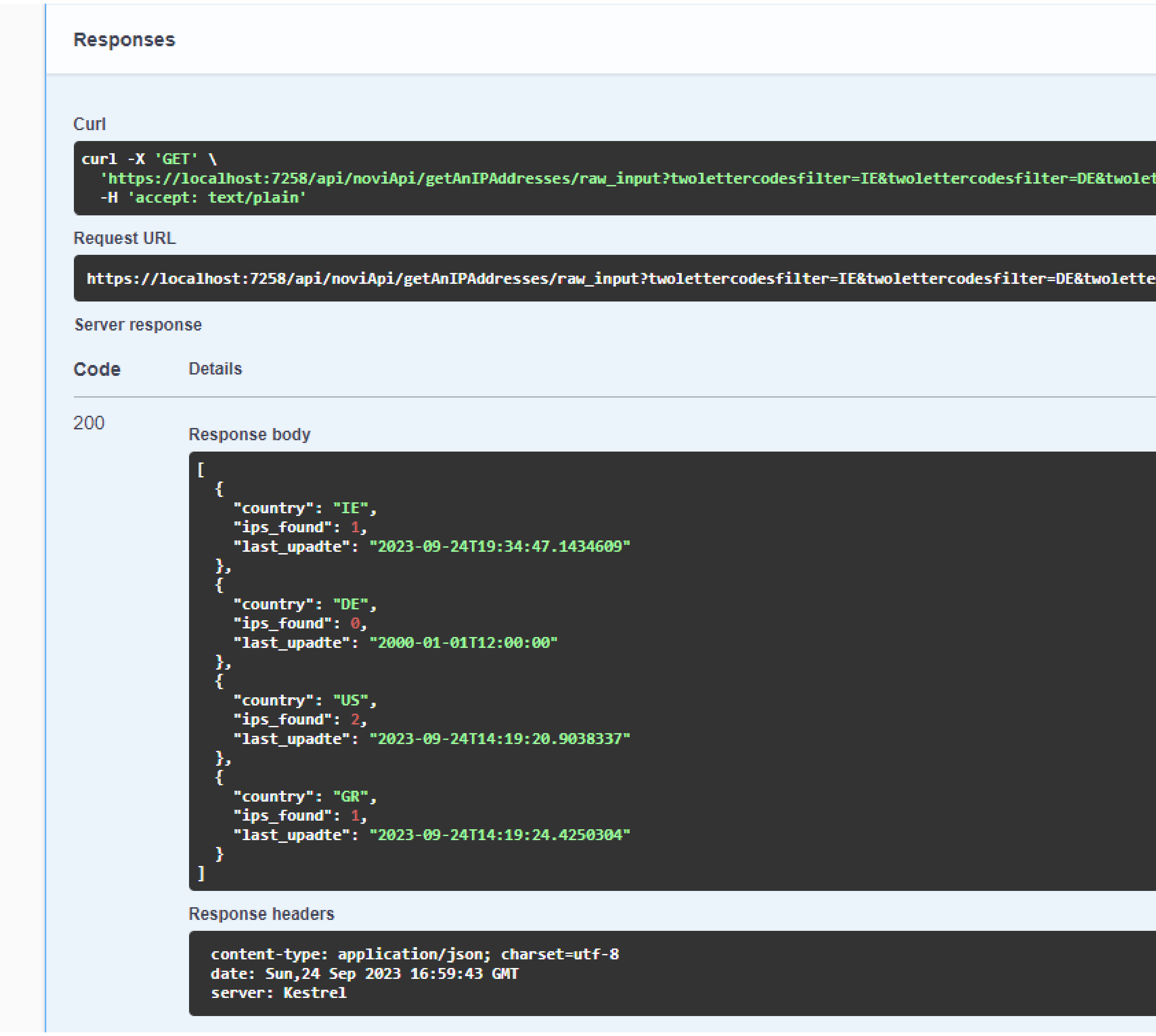
/api/noviApi/UpdateIpsBatch



GET /api/noviApi/getAnIPAddresses/raw_input

Parameters

Name	Description
twolettercodesfilter array[string] *(query)*	IE DE US GR



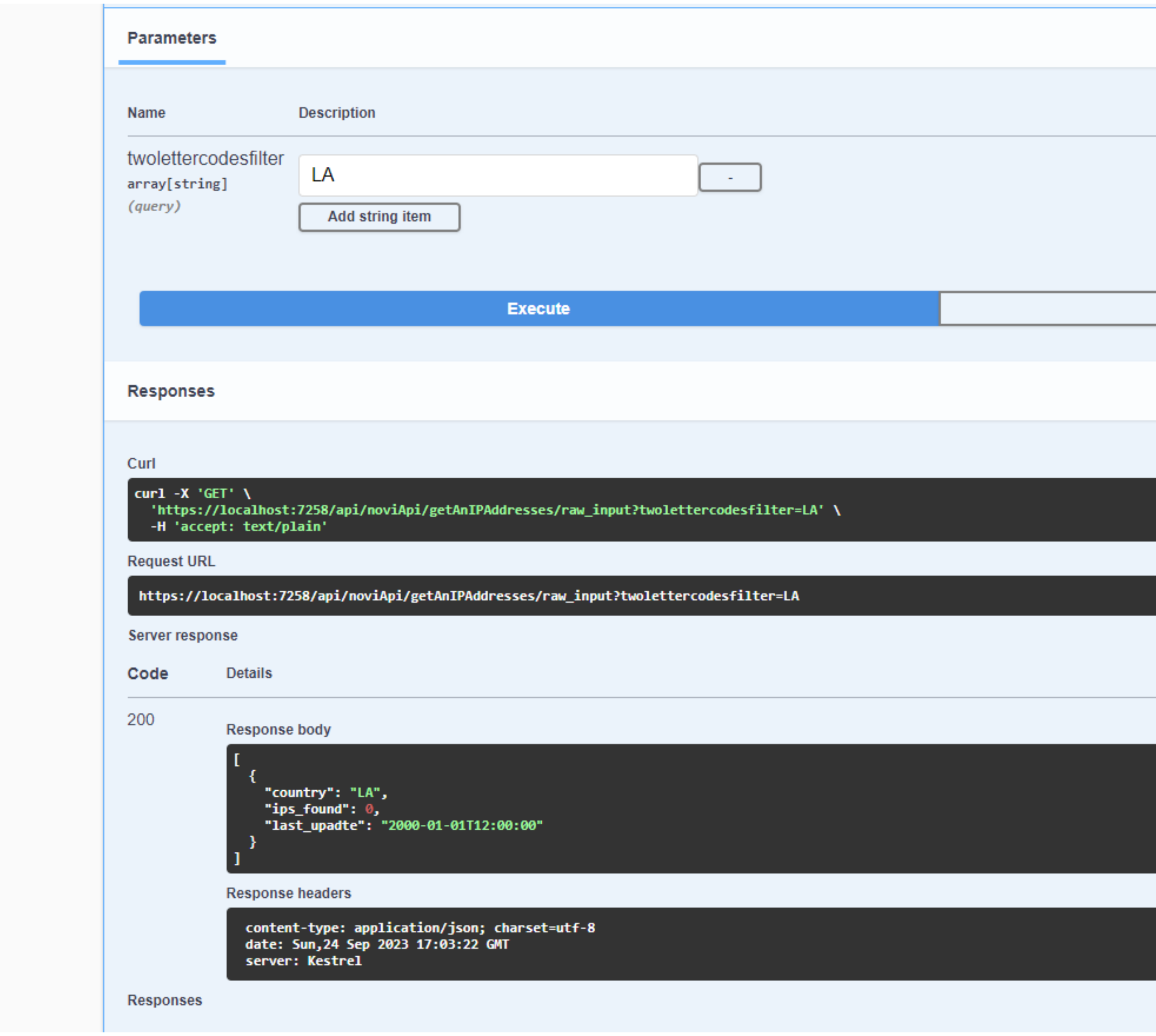
```
curl -X 'GET' \
  'https://localhost:7258/api/noviApi/getAnIPAddresses/raw_input?twolettercodesfilter=IE&twolettercodesfilter=DE&twolet
  -H 'accept: text/plain'
```

```
https://localhost:7258/api/noviApi/getAnIPAddresses/raw_input?twolettercodesfilter=IE&twolettercodesfilter=DE&twolette
```

```
[
  {
    "country": "IE",
    "ips_found": 1,
    "last_upadte": "2023-09-24T19:34:47.1434609"
  },
  {
    "country": "DE",
    "ips_found": 0,
    "last_upadte": "2000-01-01T12:00:00"
  },
  {
    "country": "US",
    "ips_found": 2,
    "last_upadte": "2023-09-24T14:19:20.9038337"
  },
  {
    "country": "GR",
    "ips_found": 1,
    "last_upadte": "2023-09-24T14:19:24.4250304"
  }
]
```

```
 content-type: application/json; charset=utf-8
 date: Sun,24 Sep 2023 16:59:43 GMT
 server: Kestrel
```

User can input as many Countries he wishes. As long they exist the response will be shown. In case of problematic Input (such as more than two letter code, or code that doen't exist the response is the string that got parsed with a 0 Ips found.



Name Description

twolettercodesfilter
array[string]
(query)

LA

Responses

Curl

```
curl -X 'GET' \
  'https://localhost:7258/api/noviApi/getAnIPAddresses/raw_input?twolettercodesfilter=LA' \
  -H 'accept: text/plain'
```

Request URL

```
https://localhost:7258/api/noviApi/getAnIPAddresses/raw_input?twolettercodesfilter=LA
```

Server response

Code Details

200

Response body

```
[
  {
    "country": "LA",
    "ips_found": 0,
    "last_upadte": "2000-01-01T12:00:00"
  }
]
```

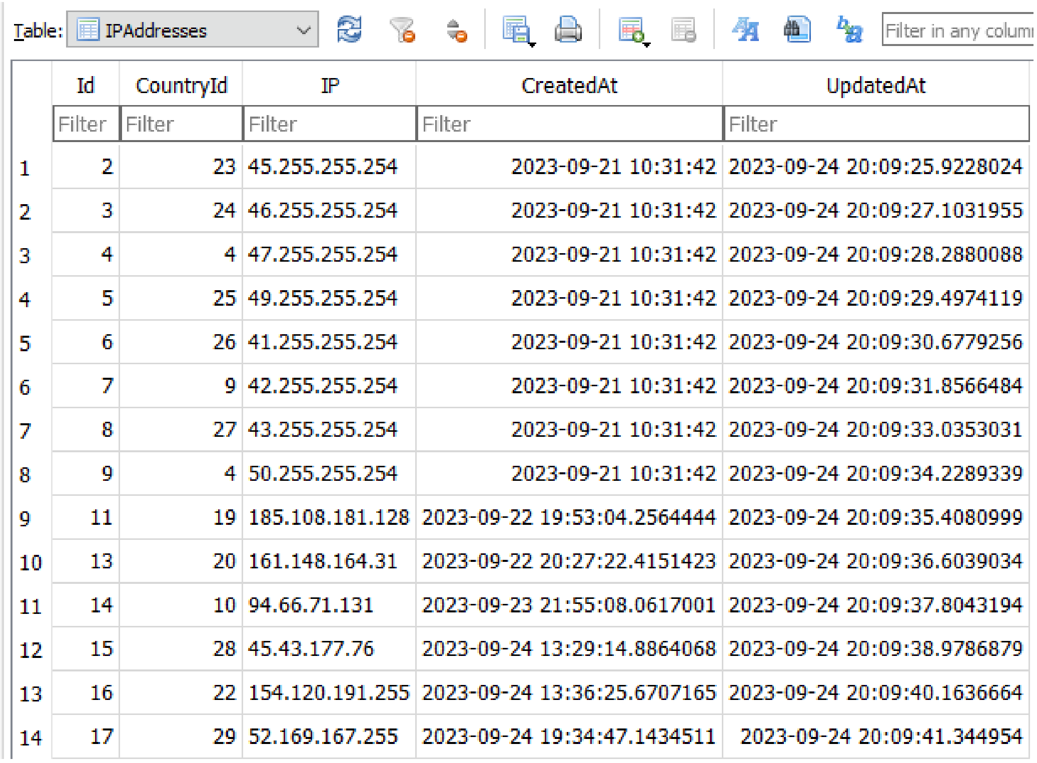
Response headers

```
content-type: application/json; charset=utf-8
date: Sun,24 Sep 2023 17:03:22 GMT
server: Kestrel
```

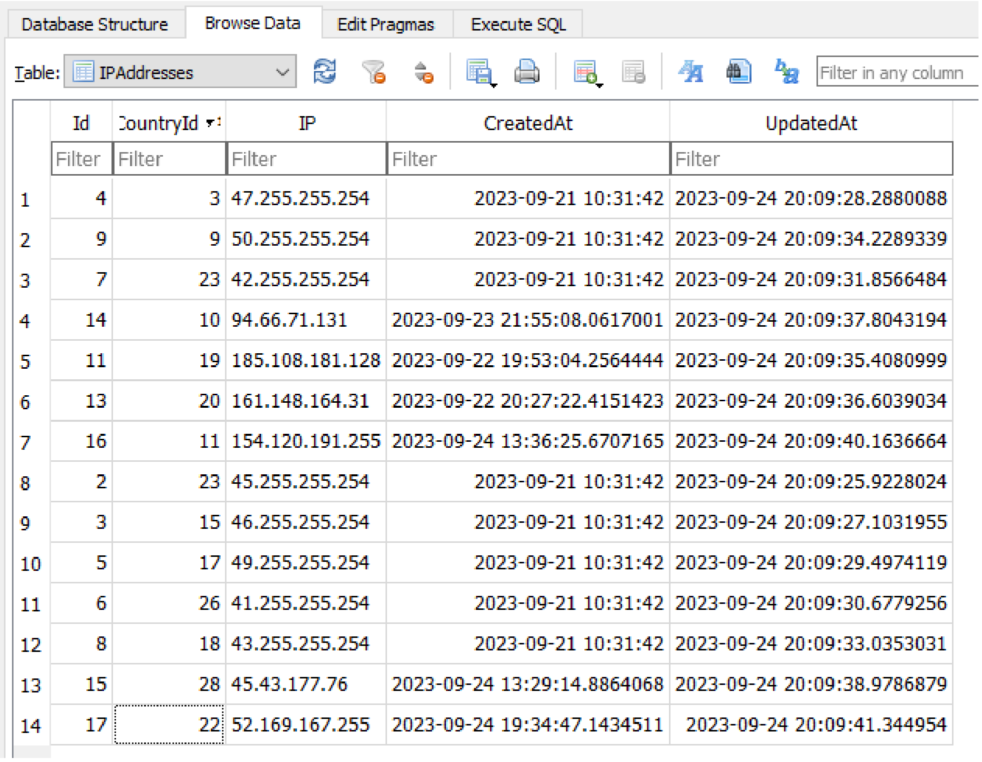
Responses

4 TASK 3: Update database

Task 3 need no input, just pressing execute leads to the database update, return either '200, Batch update completed' if succeeded or '500, "An error occurred during the batch update.' if failed for any reason.
Here I messed up the data on purpose so the Task will fix it:



	Id	CountryId	IP	CreatedAt	UpdatedAt
1	2	23	45.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:25.9228024
2	3	24	46.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:27.1031955
3	4	4	47.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:28.2880088
4	5	25	49.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:29.4974119
5	6	26	41.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:30.6779256
6	7	9	42.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:31.8566484
7	8	27	43.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:33.0353031
8	9	4	50.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:34.2289339
9	11	19	185.108.181.128	2023-09-22 19:53:04.2564444	2023-09-24 20:09:35.4080999
10	13	20	161.148.164.31	2023-09-22 20:27:22.4151423	2023-09-24 20:09:36.6039034
11	14	10	94.66.71.131	2023-09-23 21:55:08.0617001	2023-09-24 20:09:37.8043194
12	15	28	45.43.177.76	2023-09-24 13:29:14.8864068	2023-09-24 20:09:38.9786879
13	16	22	154.120.191.255	2023-09-24 13:36:25.6707165	2023-09-24 20:09:40.1636664
14	17	29	52.169.167.255	2023-09-24 19:34:47.1434511	2023-09-24 20:09:41.344954



	Id	CountryId	IP	CreatedAt	UpdatedAt
	Filter	Filter	Filter	Filter	Filter
1	4	3	47.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:28.2880088
2	9	9	50.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:34.2289339
3	7	23	42.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:31.8566484
4	14	10	94.66.71.131	2023-09-23 21:55:08.0617001	2023-09-24 20:09:37.8043194
5	11	19	185.108.181.128	2023-09-22 19:53:04.2564444	2023-09-24 20:09:35.4080999
6	13	20	161.148.164.31	2023-09-22 20:27:22.4151423	2023-09-24 20:09:36.6039034
7	16	11	154.120.191.255	2023-09-24 13:36:25.6707165	2023-09-24 20:09:40.1636664
8	2	23	45.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:25.9228024
9	3	15	46.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:27.1031955
10	5	17	49.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:29.4974119
11	6	26	41.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:30.6779256
12	8	18	43.255.255.254	2023-09-21 10:31:42	2023-09-24 20:09:33.0353031
13	15	28	45.43.177.76	2023-09-24 13:29:14.8864068	2023-09-24 20:09:38.9786879
14	17	22	52.169.167.255	2023-09-24 19:34:47.1434511	2023-09-24 20:09:41.344954

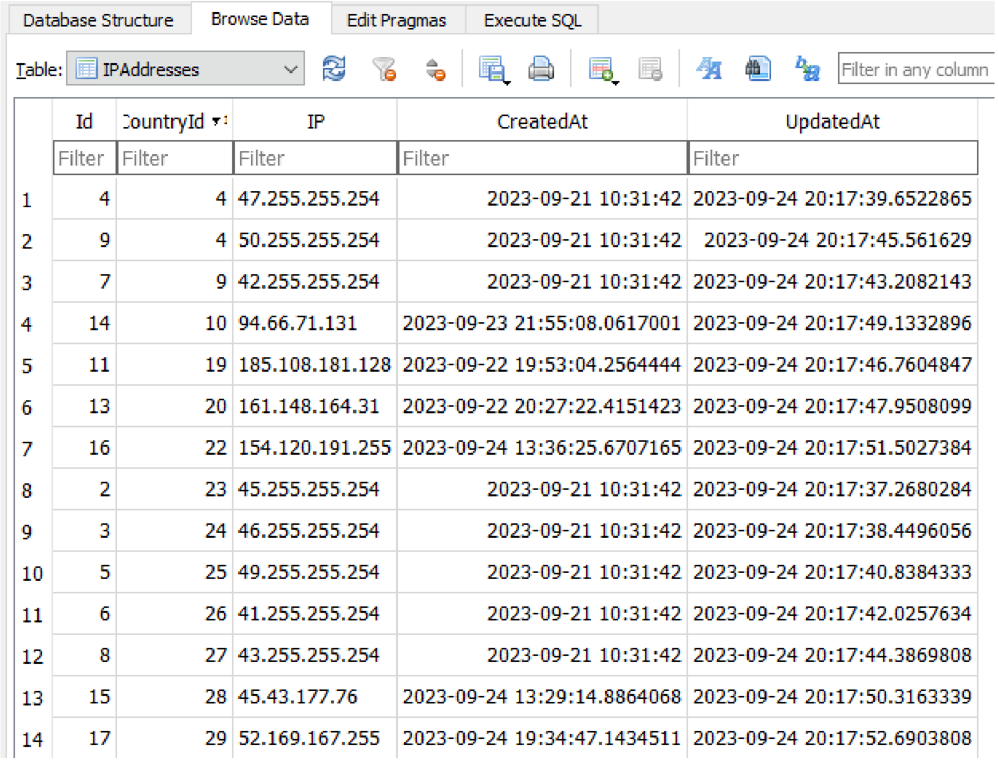


Table: IPAddresses

	Id	CountryId	IP	CreatedAt	UpdatedAt
	Filter	Filter	Filter	Filter	Filter
1	4	4	47.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:39.6522865
2	9	4	50.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:45.561629
3	7	9	42.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:43.2082143
4	14	10	94.66.71.131	2023-09-23 21:55:08.0617001	2023-09-24 20:17:49.1332896
5	11	19	185.108.181.128	2023-09-22 19:53:04.2564444	2023-09-24 20:17:46.7604847
6	13	20	161.148.164.31	2023-09-22 20:27:22.4151423	2023-09-24 20:17:47.9508099
7	16	22	154.120.191.255	2023-09-24 13:36:25.6707165	2023-09-24 20:17:51.5027384
8	2	23	45.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:37.2680284
9	3	24	46.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:38.4496056
10	5	25	49.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:40.8384333
11	6	26	41.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:42.0257634
12	8	27	43.255.255.254	2023-09-21 10:31:42	2023-09-24 20:17:44.3869808
13	15	28	45.43.177.76	2023-09-24 13:29:14.8864068	2023-09-24 20:17:50.3163339
14	17	29	52.169.167.255	2023-09-24 19:34:47.1434511	2023-09-24 20:17:52.6903808

Although it'd difficult to observe the changes, the UpdateAt attribute of each IP should do the job. For example: Originally there are only 2 IPs with CountryId=4 with UpdatedAt values:20:09. After I messed them up there was none. After the Update Task worked, there are again 2, with UpdatedAt fields: 20:17 which is now by the way.