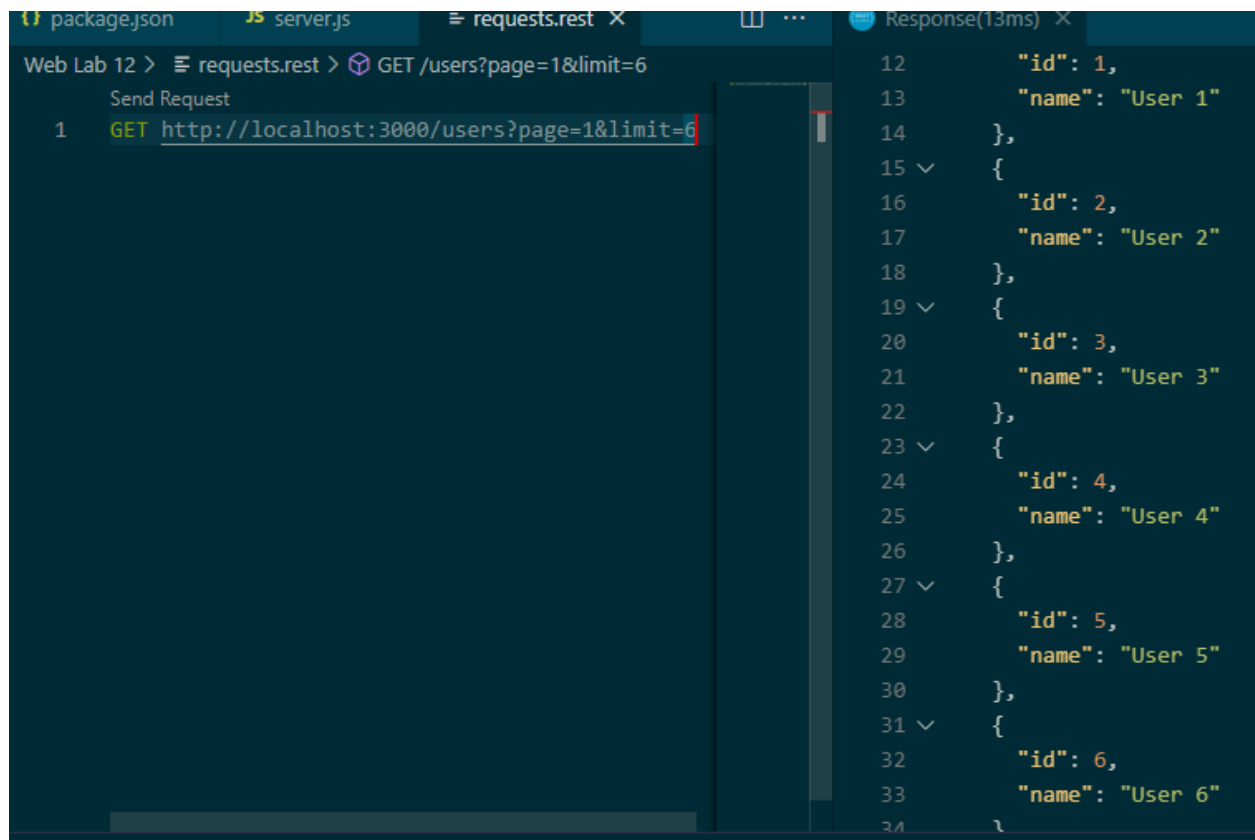


Part 1:

```
2  X-Powered-By: Express
3  Content-Type: application/json; charset=utf-8
4  Content-Length: 334
5  ETag: W/"14e-TwCdIFnEJC058KJnpi60m9SACZg"
6  Date: Sat, 30 Apr 2022 14:26:54 GMT
7  Connection: close
8
9  [
10 {
11   "id": 1,
12   "name": "User 1"
13 },
14 {
15   "id": 2,
16   "name": "User 2"
17 },
18 {
19   "id": 3,
20   "name": "User 3"
21 },
22 {
23   "id": 4,
24   "name": "User 4"
```

```
GET http://localhost:3000/users
```

Part 2:



The screenshot shows a REST client interface with two tabs: 'requests.rest' and 'Response(13ms)'. The 'requests.rest' tab displays a GET request to 'http://localhost:3000/users?page=1&limit=6'. The 'Response(13ms)' tab shows the JSON response, which is an array of 6 user objects. The response is formatted with line numbers 12 through 34.

```
12     "id": 1,  
13     "name": "User 1"  
14   },  
15   {  
16     "id": 2,  
17     "name": "User 2"  
18   },  
19   {  
20     "id": 3,  
21     "name": "User 3"  
22   },  
23   {  
24     "id": 4,  
25     "name": "User 4"  
26   },  
27   {  
28     "id": 5,  
29     "name": "User 5"  
30   },  
31   {  
32     "id": 6,  
33     "name": "User 6"  
34   }
```

```
const express = require('express')  
const app = express()  
  
const users = [  
  {id: 1, name: 'User 1'},  
  {id: 2, name: 'User 2'},  
  {id: 3, name: 'User 3'},  
  {id: 4, name: 'User 4'},  
  {id: 5, name: 'User 5'},  
  {id: 6, name: 'User 6'},  
  {id: 7, name: 'User 7'},  
  {id: 8, name: 'User 8'},  
  {id: 9, name: 'User 9'},  
  {id: 10, name: 'User 10'},  
  {id: 11, name: 'User 11'},  
  {id: 12, name: 'User 12'},  
  {id: 13, name: 'User 13'}  
]
```

```
]

app.get('/users', (req, res) => {
  const page = req.query.page
  const limit = req.query.limit

  const startIndex = (page - 1) * limit
  const endIndex = page * limit

  const results = {}

  results.results = users.slice(startIndex, endIndex)

  res.json(results)
})

app.listen(3000)
```

Part 3:

```
Send Request
1 GET http://localhost:3000/users?page=1&limit=4

2 X-Powered-By: Express
3 Content-Type: application/json
4 Content-Length: 113
5 ETag: W/"71-CoMYyFpPLp3x"
6 Date: Sat, 30 Apr 2022 14:00:00 GMT
7 Connection: close
8
9 {
10   "results": [
11     {
12       "id": 1,
13       "name": "User 1"
14     },
15     {
16       "id": 2,
17       "name": "User 2"
18     },
19     {
20       "id": 3,
21       "name": "User 3"
22     },
23     {
24       "id": 4,
25       "name": "User 4"
26     }
27   ]
28 }
```

```
1 GET http://localhost:3000/customers?page=1&limit
```

```
2 X-Powered-By: Express
3 Content-Type: application
4 Content-Length: 117
5 ETag: W/"75-hcKorYl0vuykp
6 Date: Sat, 30 Apr 2022 16
7 Connection: close
8
9 √ [
10 √ {
11   "id": 1,
12   "name": "Customer 1"
13 },
14 √ {
15   "id": 2,
16   "name": "Customer 2"
17 },
18 √ {
19   "id": 3,
20   "name": "Customer 3"
21 },
22 √ {
23   "id": 4,
24   "name": "Customer 4"
25 }
26 ]
```

Web Lab 12 > requests.rest > GET /admins?page=1&limit=4

Send Request

1 GET http://localhost:3000/admins?page=1&limit=4

```
1 HTTP/1.1 200 OK
2 X-Powered-By: Express
3 Content-Type: application/json
4 Content-Length: 105
5 ETag: W/"69-D3kC08i2xh"
6 Date: Sat, 30 Apr 2022 14:28:12 GMT
7 Connection: close
8
9 √ [
10 √ {
11   "id": 1,
12   "name": "Admin 1"
13 },
14 √ {
15   "id": 2,
16   "name": "Admin 2"
17 },
18 √ {
19   "id": 3,
20   "name": "Admin 3"
21 },
22 √ {
23   "id": 4,
24   "name": "Admin 4"
25 }
26 ]
```

```
const express = require('express')
```

```
const app = express()
```

```
const users = [
```

```
  {id: 1, name: 'User 1'},
```

```
  {id: 2, name: 'User 2'},
```

```
  {id: 3, name: 'User 3'},
```

```
  {id: 4, name: 'User 4'},
```

```
  {id: 5, name: 'User 5'},
```

```
  {id: 6, name: 'User 6'},
```

```
  {id: 7, name: 'User 7'},
```

```
  {id: 8, name: 'User 8'},
```

```
  {id: 9, name: 'User 9'},
```

```
  {id: 10, name: 'User 10'},
```

```
  {id: 11, name: 'User 11'},
```

```
  {id: 12, name: 'User 12'},
```

```
  {id: 13, name: 'User 13'}]
```

```
const customers = [
  {id: 1, name: 'Customer 1'},
  {id: 2, name: 'Customer 2'},
  {id: 3, name: 'Customer 3'},
  {id: 4, name: 'Customer 4'},
  {id: 5, name: 'Customer 5'},
  {id: 6, name: 'Customer 6'},
  {id: 7, name: 'Customer 7'},
  {id: 8, name: 'Customer 8'},
  {id: 9, name: 'Customer 9'},
  {id: 10, name: 'Customer 10'}
]

const admins = [
  {id: 1, name: 'Admin 1'},
  {id: 2, name: 'Admin 2'},
  {id: 3, name: 'Admin 3'},
  {id: 4, name: 'Admin 4'},
  {id: 5, name: 'Admin 5'},
  {id: 6, name: 'Admin 6'},
  {id: 7, name: 'Admin 7'},
  {id: 8, name: 'Admin 8'},
  {id: 9, name: 'Admin 9'},
  {id: 10, name: 'Admin 10'}
]

app.get('/users', (req, res) => {
  const page = req.query.page
  const limit = req.query.limit

  const startIndex = (page - 1) * limit
  const endIndex = page * limit

  const results = {}

  results.results = users.slice(startIndex, endIndex)

  res.json(results)
})

app.get('/customers', (req, res) => {

  const page = req.query.page
  const limit = req.query.limit
```

```
    const startIndex = (page - 1) * limit
    const endIndex = page * limit
    const resultCustomers = customers.slice(startIndex, endIndex)
    res.json(resultCustomers)
  })

app.get('/admins', (req, res) => {

  const page = req.query.page
  const limit = req.query.limit
  const startIndex = (page - 1) * limit
  const endIndex = page * limit
  const resultAdmins = admins.slice(startIndex, endIndex)
  res.json(resultAdmins)
})

app.listen(3000)
```

Part 4: