

# API Testing

## Topic: api chaining

### Questions asked in interviews

Q. how to pass values from one request(api) to another request(api)

Q. what is api chaining

Q. how to create variables and pass the data

Q. how to save data into variables

Q. how to pass data through variables

Q. How to send response body data values from one request to another

etc

## Two concepts:

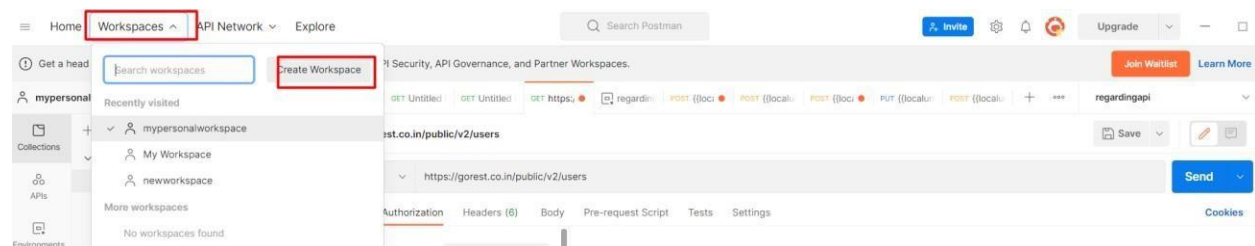
1. How to make variables for Authorization/url etc and to pass in different api requests
2. How to pass response body values from one request to another request

Note: never forget to click on save/ctrl+s after doing any action in postman..

## 1. How to make variables for Authorization/url etc and to pass in different api requests

Note: if workspace is already created the skip steps for the workspace.. no need to create workspace again and again.. its one time activity only

### Step1: create a workspace



### Step 2: select the personal workspace

## Create workspace

**Name**

APICHAINING

**Summary**  
Add a brief summary about this workspace.

**Visibility**  
Determines who can access this workspace.

☒ **Personal**  
Only you can access

☐ **Private**  
Only invited team members can access

☐ **Team**  
All team members can access

☐ **Public**  
Everyone can view

Create Workspace Cancel

### Step: create the env first

Home Workspaces ▾ API Network ▾ Explore

Search Postn

2023 New Import +

Collections

APIs

**Environments**

Mock Servers

Monitors

Globals

1. click on environment.....  
2. click on + icon to create env.....

You don't have any environments.

An environment is a set of variables that allows you to switch the context of your

### Step : set the variables which you want (it can be one/two or multiple)

2023 New Import New Environment + ... No Environment

Collections + ...

APIs

Environments

Mock Servers

Monitors

Globals

New Environment

New Environment

VARIABLE	TYPE	INITIAL VALUE	CURRENT VALUE	...	Per
<input checked="" type="checkbox"/> auth	default				
<input checked="" type="checkbox"/> baseurl	default	https://gorest.co.in/	https://gorest.co.in/		
<input type="checkbox"/>	default				

1. click on the env and give name to env as New Environment....  
 2. add the variables which you want...  
 3. ex. add variables as auth and baseurl.....  
 4. add the value of baseurl only.....

Add a new variable

## Step: Create the collection and add the urls in collection

APICHAINING New Import Overview + ...

Collections + ...

APIs

Environments

Mock Servers

Monitors

New Collection

1. click on + button to create collection  
 2. automatically collection will get create, and if not then create you own collection by giving any name  
 3. click on the '>' icon, where you can add the request.....

APICHAINING

Add a brief summary about this workspace

Add a description to explain all about this workspace

Activity

Today

kapil dharmale edited the New Collection collection. View Changelog  
 9 mins ago

kapil dharmale added the New Collection collection  
 10 mins ago

## Step : add many api request(ex. 2/3/10)

APICHAINING New Import Overview + ...

Collections + ...

APIs

Environments

New Collection

This collection is empty  
 Add a request to start working.

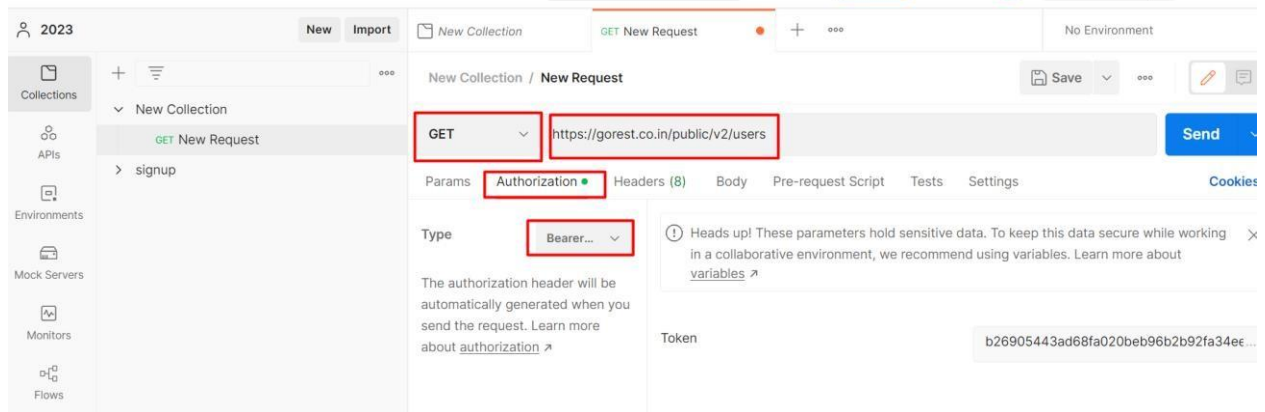
APICHAINING

Add a brief summary about this workspace

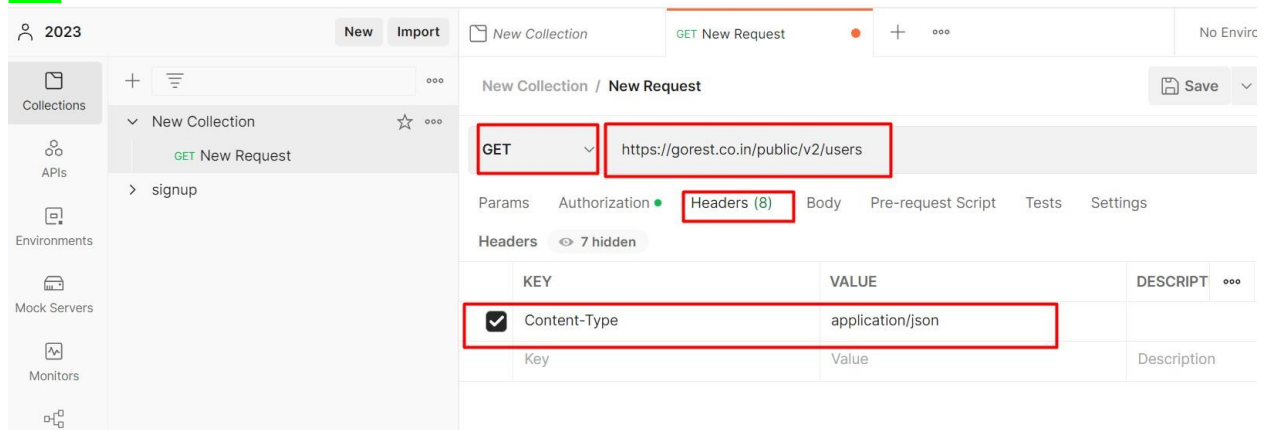
Add a description to explain all about

Activity

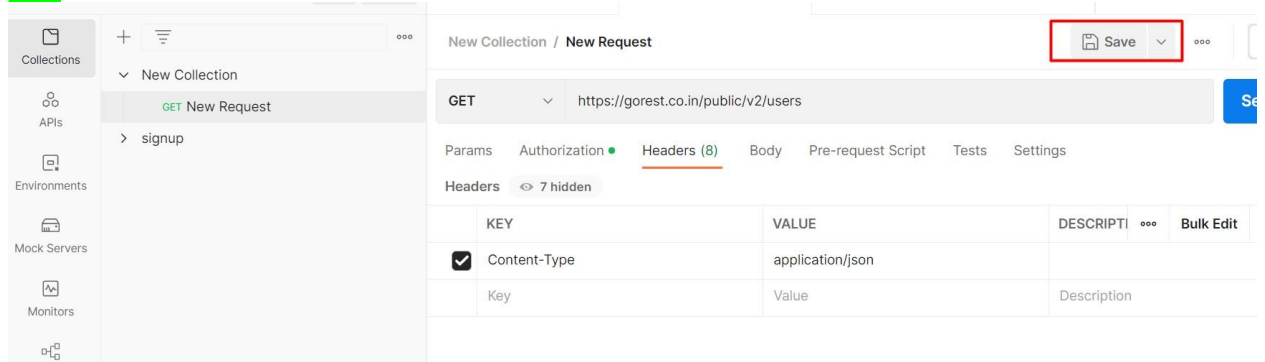
## a. Add get request



next



next



Step: Add post request now(second request) it is not restricted to add get or post, you can add any request you want

b.

Note: keep remember In case of gorest for the put and post always change the email id , otherwise you will get the error.. every time you hit the api you need to change the email id..

c.

d. Because email id is unique, on the same email id you cant create duplicate data on same site/application

- e. Note: also whenever you are doing the operation for put, you have to add the id in put url..Id you will get it from POST operation

f.

The screenshot shows the Postman interface. On the left sidebar, the 'Collections' section is expanded, and a 'New Collection' menu is open. The 'Add request' option is highlighted with a red box. In the main panel, the 'New Request' tab is active, showing a GET request to 'https://gorest.co.in/public/v2/users'. The 'Headers' tab is selected, and a table of headers is visible. Below the table, there are two red instructions: '1. click on 3 dots on new collection.....' and '2. click on add request.....'.

KEY	VALUE
<input checked="" type="checkbox"/> Content-Type	application/json
Key	Value

1. click on 3 dots on new collection.....  
2. click on add request.....

Next

The screenshot shows the Postman interface with a 'POST' request configured. The 'Authorization' tab is selected, and the 'Type' is set to 'Bearer...'. The 'Token' field contains the value 'b26905443ad68fa020beb96b2b92fa34e'. The 'Send' button is visible on the right. A warning message is displayed: 'Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about variables'.

POST <https://gorest.co.in/public/v2/users> [Send](#)

Params **Authorization** Headers (8) Body Pre-request Script Tests Settings [Coo](#)

Type **Bearer...**

The authorization header will be automatically generated when you send the request. Learn more about [authorization](#)

Token `b26905443ad68fa020beb96b2b92fa34e`

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Next

2023 New Import New Collection GET New Request POST New Request No Environment

Collections + New Collection GET New Request GET New Request > signup

APIs Environments Mock Servers Monitors Flows

New Collection / New Request

POST https://gorest.co.in/public/v2/users

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

Headers 8 hidden

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> Content-Type	application/json	

Key Value Description

Next

2023 New Import New Collection GET New Request POST New Request No Environment

Collections + New Collection GET New Request GET New Request > signup

APIs Environments Mock Servers Monitors Flows History

New Collection / New Request

POST https://gorest.co.in/public/v2/users

Params Authorization Headers (10) Body Pre-request Script Tests Settings

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

```
1 {
2   "name": "kapil_s_",
3   "email": "kapil1234@gmail.com",
4   "gender": "male",
5   "status": "inactive"
6 }
```

Next

2023 New Import New Collection GET New Request POST New Request No Environment

Collections + New Collection GET New Request POST New Request > signup

APIs Environments Mock Servers Monitors Flows

New Collection / New Request

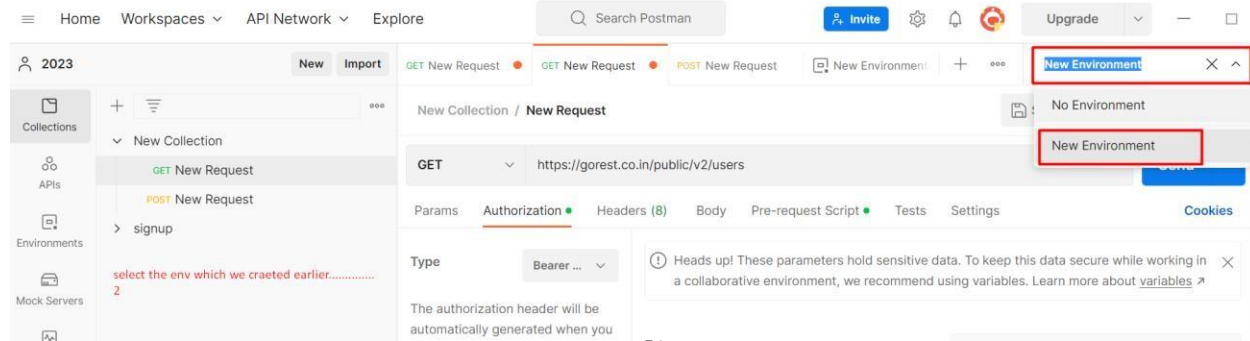
POST https://gorest.co.in/public/v2/users

Params Authorization Headers (10) Body Pre-request Script Tests Settings

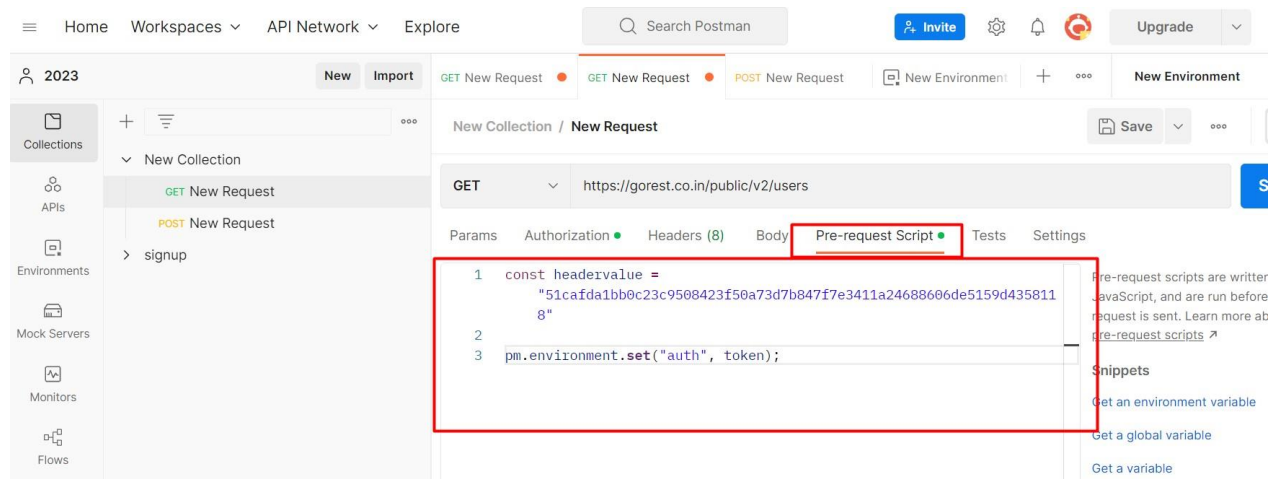
none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "name": "kapil_s_",
3   "email": "kapil1234@gmail.com",
4   "gender": "male",
5   "status": "inactive"
6 }
```

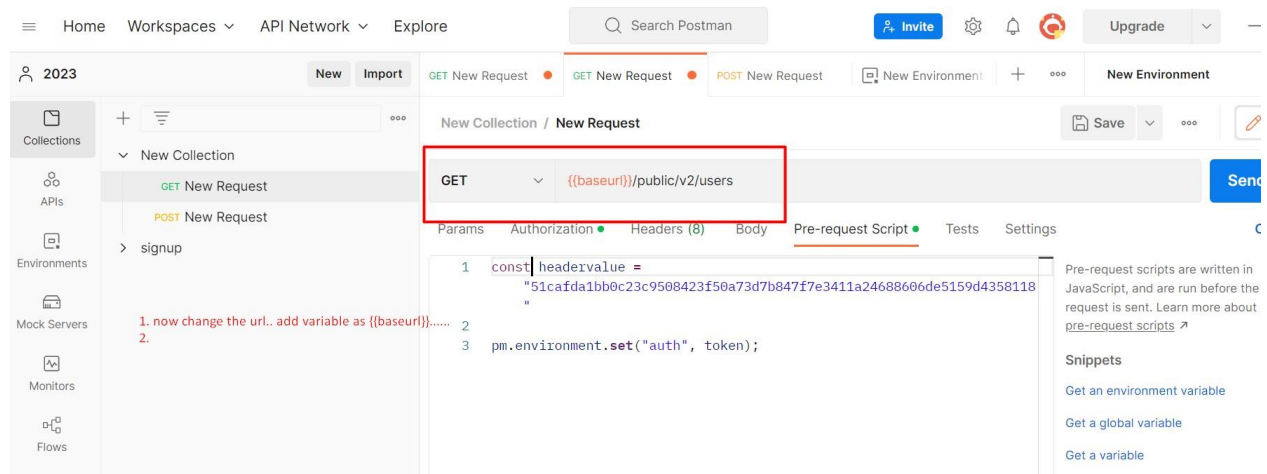
Now get and post these 2 request are created successfully, api chaining will start from here..



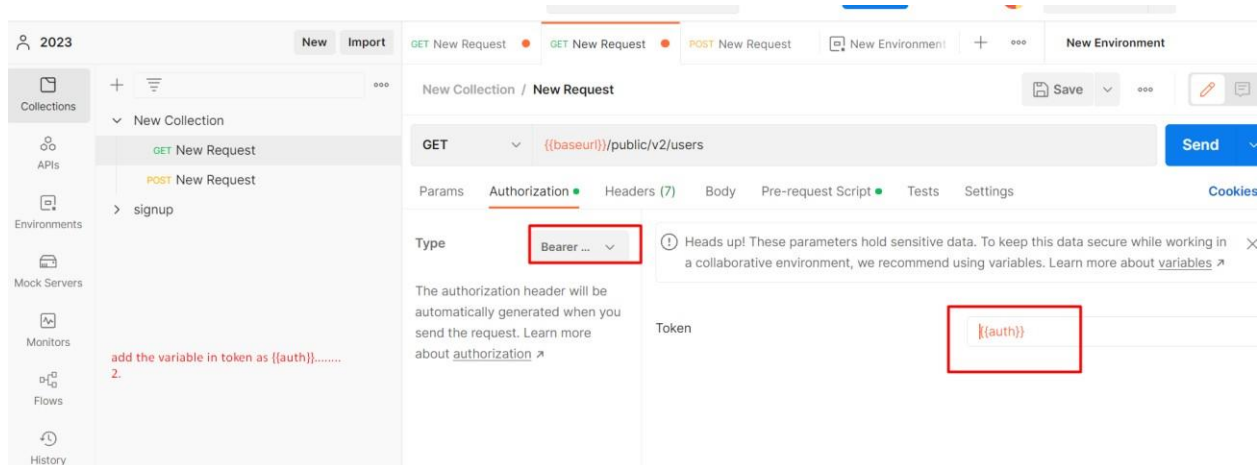
Step: add the code in pre-request script



Step: add the variable in url as {{baseUrl}}

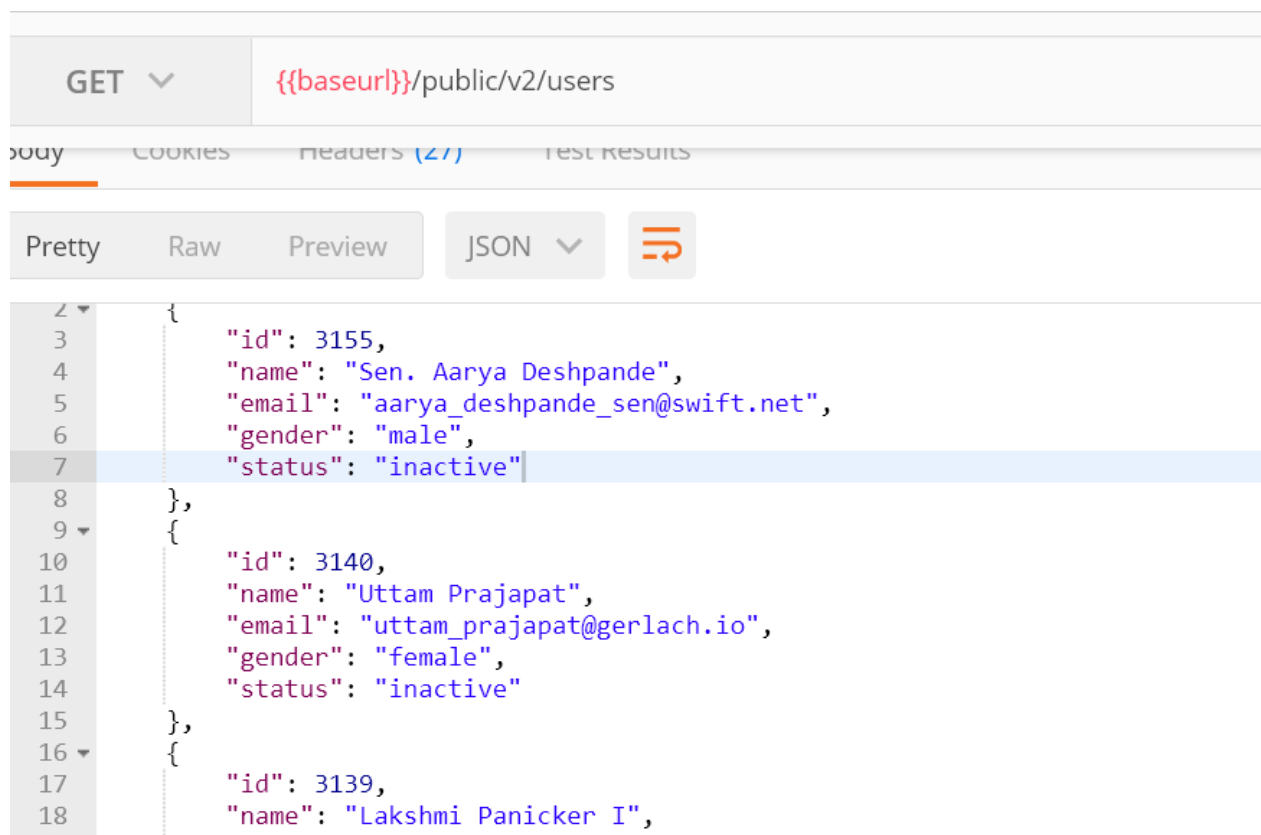


Step: do it same for the authorization as well



Note: same variables as auth and baseurl you can use in any request now

Step: hit the get api now.. and api will get successfully hit.



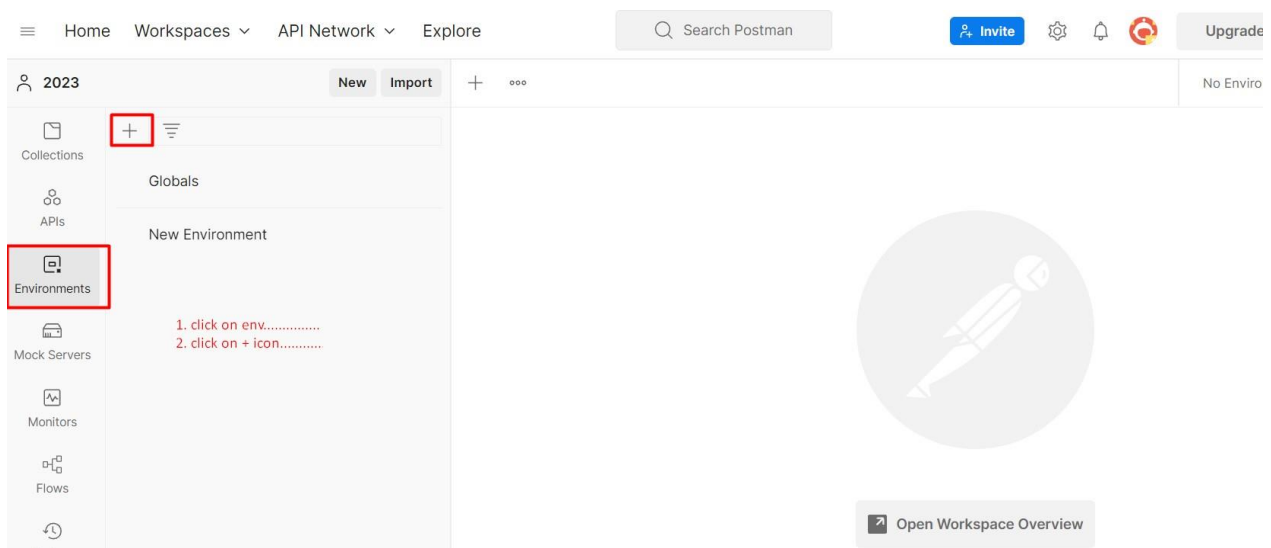
This is how we can variable the things in postman



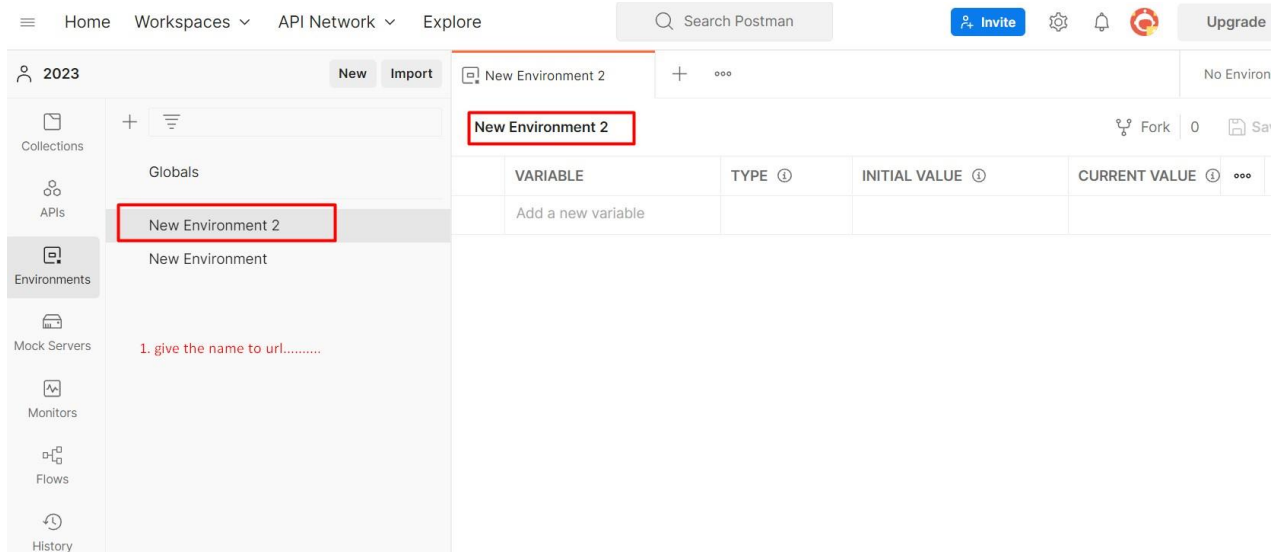
## Concept2:

#How to send response body data from one request to another

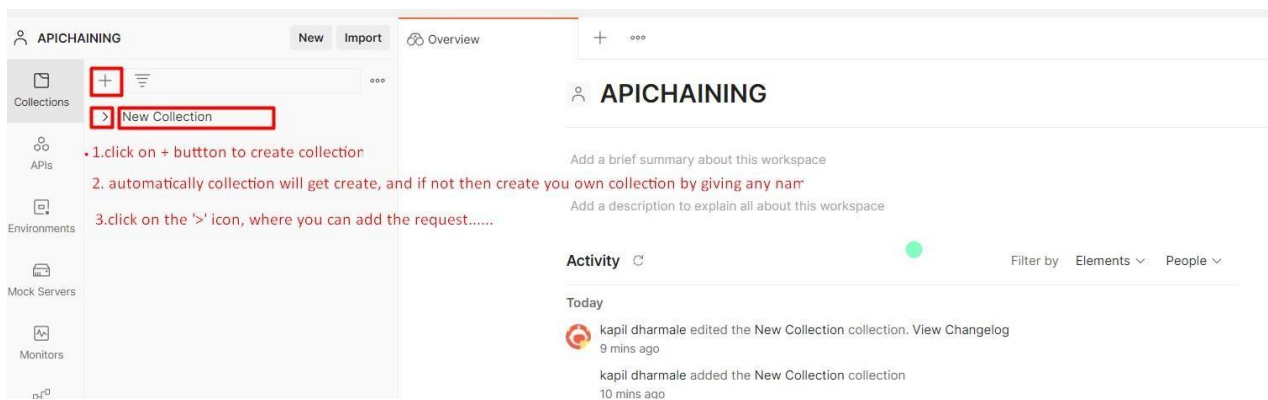
Step:create the env first



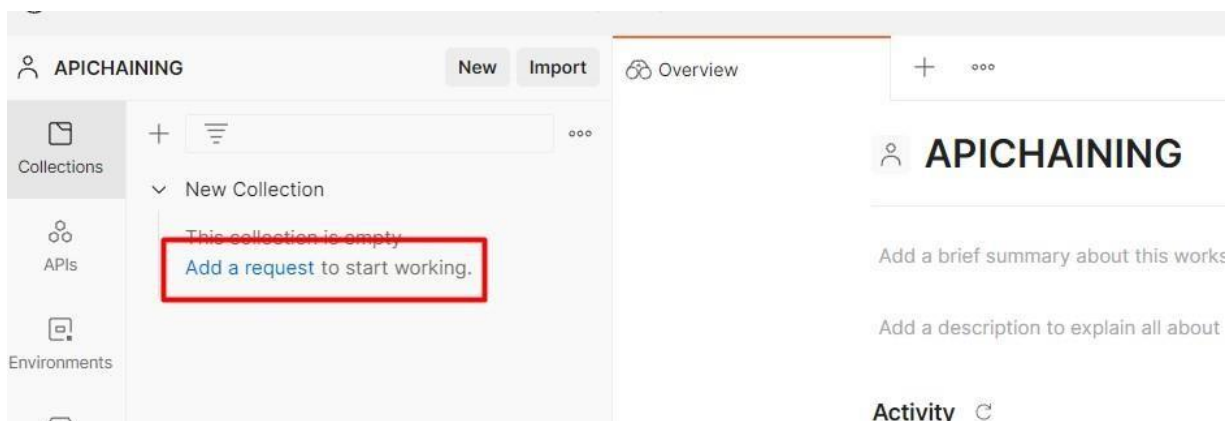
Step: give any name to env and save it



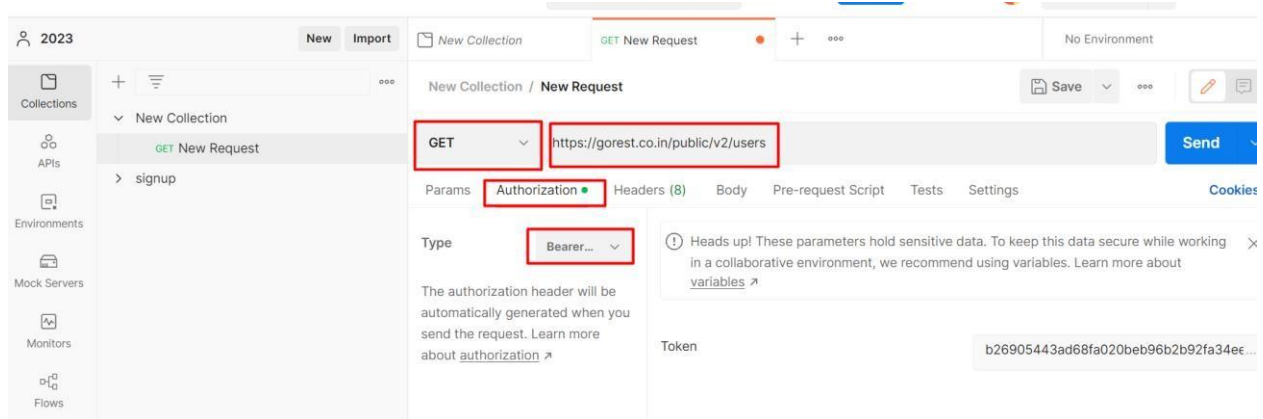
Step: now create the collection and add the many request to collection



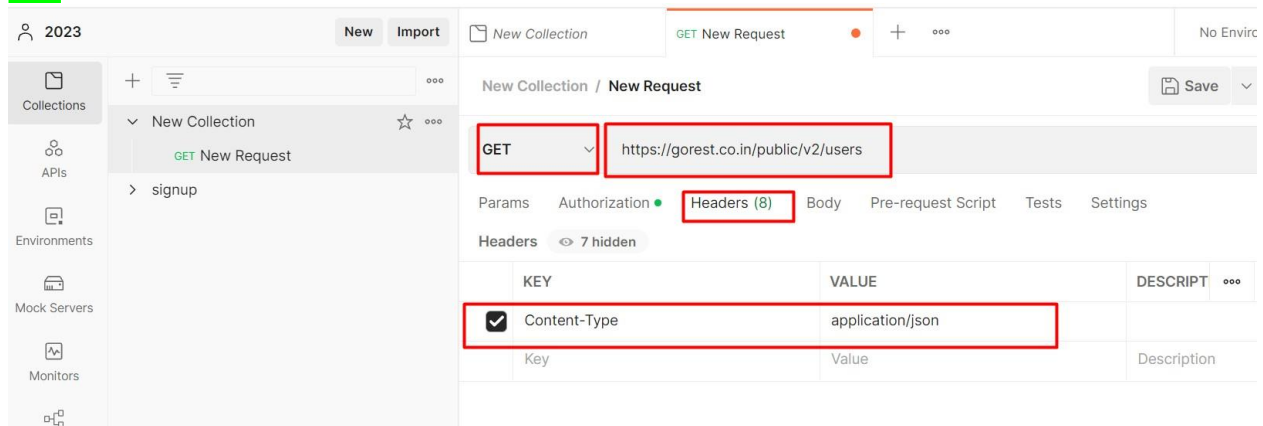
Step : add many api request(ex. 2/3/10)



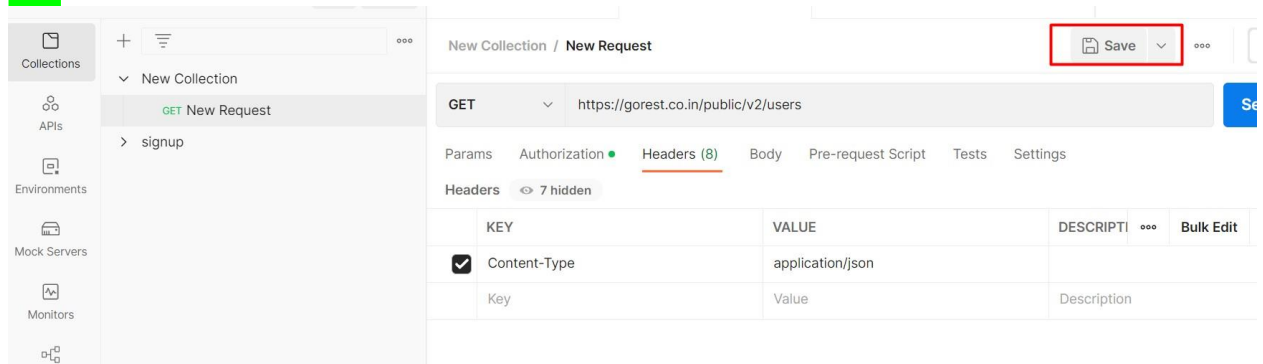
## a. Add get request



next



next



## b. Add post request now(second request) it is not restricted to add get or post, you can add any request you want

c.

Note: keep remember In case of goREST for the put and post always change the email id , otherwise you will get the error.. every time you hit the api you need to change the email id..

d.

e. Because email id is unique, on the same email id you cant create duplicate data on same site/application

- f. **Note: also whenever you are doing the operation for put, you have to add the id in put url..Id you will get it from POST operation**

g.

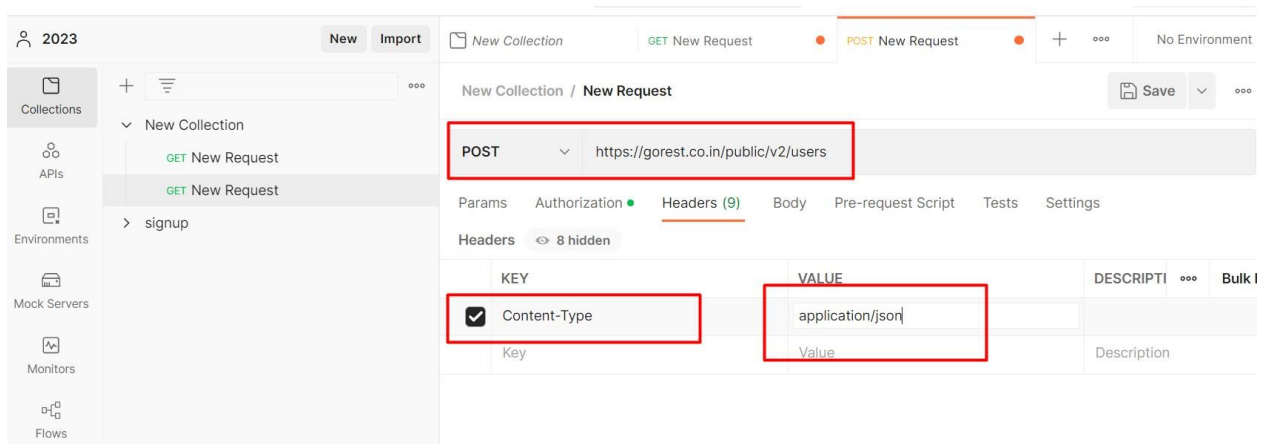
The screenshot shows the Postman interface. On the left sidebar, under 'Collections', a 'New Collection' menu is open. The 'Add request' option is highlighted with a red box. In the main panel, a 'New Request' is being created with the URL 'https://gorest.co.in/public/v2/users'. The 'Headers' tab is selected, and a header 'Content-Type' with value 'application/json' is added. Below the interface, two steps are listed:

1. click on 3 dots on new collection.....
2. click on add request.....

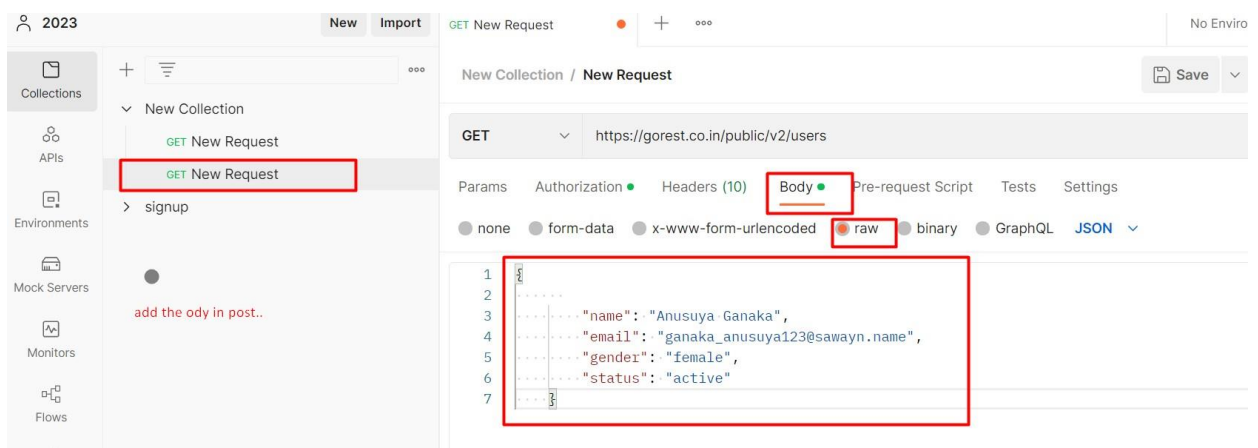
Next

The screenshot shows the Postman interface with the 'New Request' panel. The 'POST' method is selected for the URL 'https://gorest.co.in/public/v2/users'. The 'Authorization' tab is selected, and the 'Type' is set to 'Bearer...'. A warning message states: 'Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about variables'. The 'Token' field contains the value 'b26905443ad68fa020beb96b2b92fa34e'.

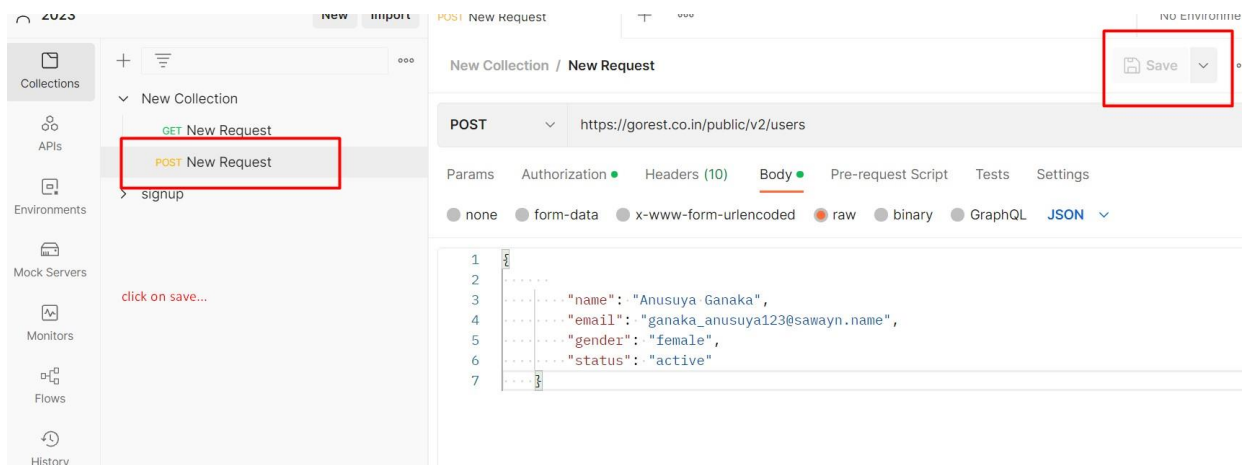
Next



Next




Next




Now get and post these 2 request are created successfully, api chaining will start from here..

Step: run the get api first and select the value you want to pass in another

request and get the path of that value

GET  https://gorest.co.in/public/v2/users

Body Cookies Headers (27) Test Results

Pretty Raw Preview JSON 

```
1 [
2   {
3     "id": 3129,
4     "name": "Anusuya Ganaka",
5     "email": "ganaka_anusuya@sawayn.name",
6     "gender": "female",
7     "status": "active"
8   },
9   {
10    "id": 3128,
11    "name": "Nawal Pothuvaal",
12    "email": "nawal_pothuvaal@oconnell-bosco.org",
13    "gender": "female",
14    "status": "inactive"
15  },
16  {
17    "id": 3127,
18    "name": "Shreya Iyer",
19    "email": "iyer_shreya@hoegeer.co",
20    "gender": "female",
21    "status": "active"
22  },
23  {
24    "id": 3126,
25    "name": "Brahmdev Namboothiri",
26    "email": "namboothiri_brahmdev@donnelly-schowalter.net",
27    "gender": "male",
28    "status": "active"
29  }
30 ]
```

1. lets say we want to thrasffer this value in anothor request..  
2. copy the all response and paste in json path finder application

Step: now open json path finder app.

<https://jsonpathfinder.com/>

JSON Path Finder

```

1 [
2 {
3   "id": 3129,
4   "name": "Anusuya Ganaka",
5   "email": "ganaka_anusuya@sawayn.name",
6   "gender": "female",
7   "status": "active"
8 },
9 {
10  "id": 3128,
11  "name": "Nawal Pothuvaal",
12  "email": "nawal_pothuvaal@oconnell-bosco.org",
13  "gender": "female",
14  "status": "inactive"
15 },
16 {
17  "id": 3127,
18  "name": "Shreya Iyer",
19  "email": "iyer_shreya@hoegeer.co",
20  "gender": "female",
21  "status": "active"
22 },
23 {
24  "id": 3126,
25  "name": "Brahmdev Namboothiri",
26  "email": "namboothiri_brahmdev@donnelly-schowalter.net",
27  "gender": "male",
28  "status": "active"
29 }
30 ]

```

Path: `x[0].name`

0: `x[0].name`

1: `x[0].name`

2: `x[0].name`

3: `x[0].name`

4: `x[0].name`

5: `x[0].name`

6: `x[0].name`

1. get the path.....  
2. copy the path but do not select the 'x' ... it just prefix.....

1. paste all response in left side block.....  
2. select the user from which you want to transfer the data.....  
3. in right hand section click on the user and explore it.....  
4. click on the field for which you want to take the value.....

## Step: open request and add code In test tab

Home Workspaces API Network Explore

Search Postman

2023 New Import New Environment 2 GET New Request POST New Request

New Collection / New Request

GET `https://gorest.co.in/public/v2/users`

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

```

1 jsondata=JSON.parse(responseBody)
2 value=jsondata.data[1].name
3
4 postman.setEnvironmentVariable("user1", value);

```

1. click on get request(first request).....  
2. add the code in test tab.....

Test scripts are run after received. Learn more about test scripts

Snippets

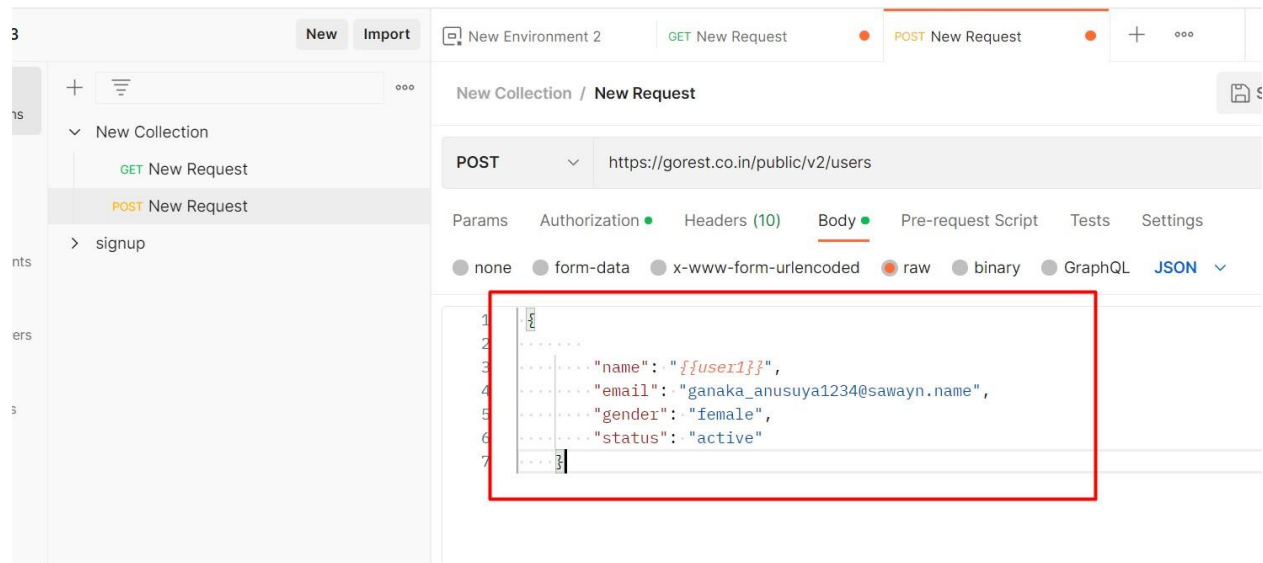
Get an environment variable

Get a global variable

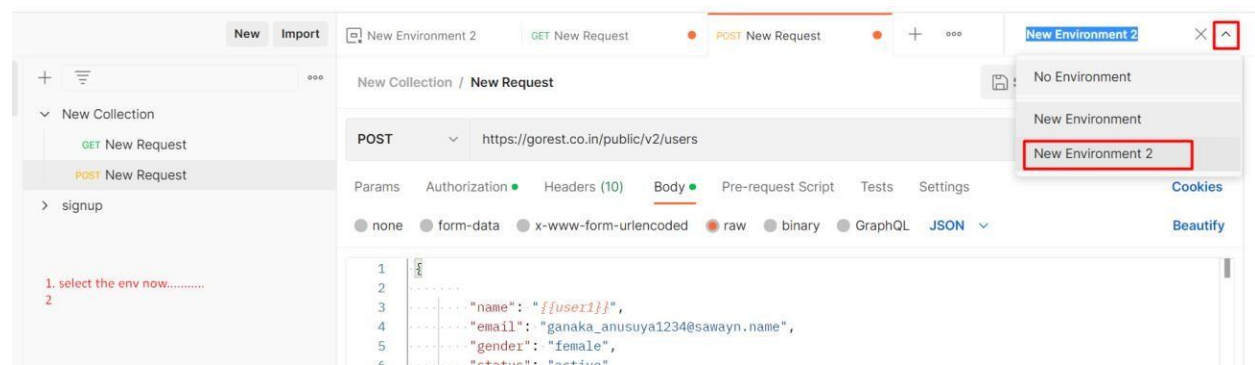
Get a local variable

## Step: now open any other request and add the variable into that request

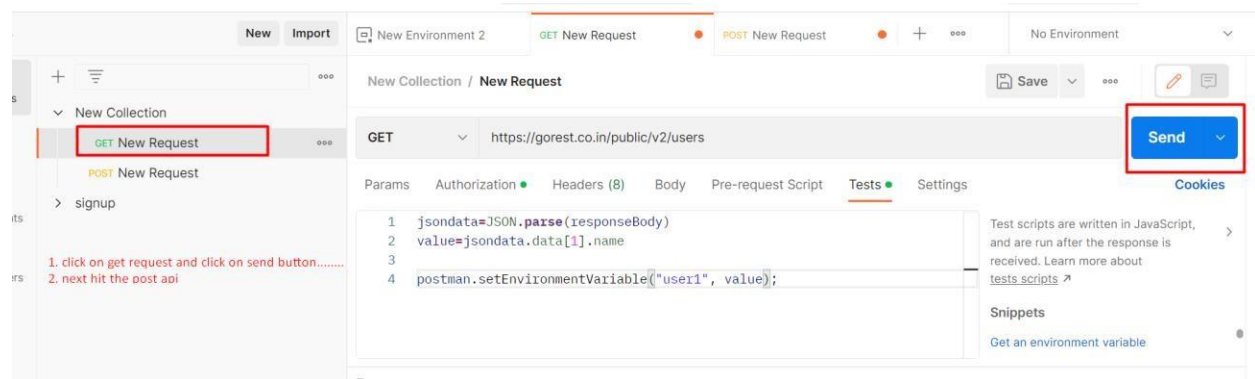
Note: change the email id always



Step: now select the env

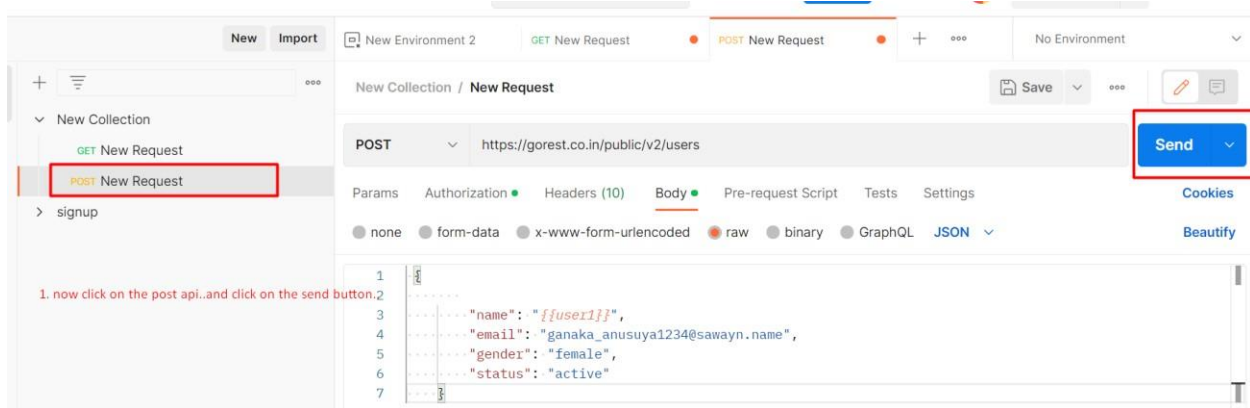


Step: Now hit the first request..click on send button



Step: now hit the next request





Step: api will be successfully and data will get created.  
You will be able to see the successful response