What is Rest API ?

Application Programming Interface(API) is a software interface that allows two aplications or softwares to intract ,communicate and exchange data with each other without any user intervention.

API is a collection of software Functions and procedures.

REST(Representational State Transfer)

- REST protocols overcome SOAP's dependency on XML by supporting data transmission in multiple formats such as JSON (most prominent), HTML, Python, plain text as well as media files
- REST APIs follow a client-server architecture and must be stateless.
- Stateless communication implies that no client data is stored between GET requests.

HTTP:-

HTTP stands for Hypertext Transfer Protocol.

Hypertext Transfer Protocol is a set of rule which Is used for transfering the files like,audio,video,image,text and other multimedia files on the www.

HTTP methods

Following four HTTP methods are commonly used in REST based architecture.

- GET − Provides a read only access to a resource.
- POST − Used to create a new resource.
- DELETE − Used to remove a resource.
- PUT − Used to update a existing resource or create a new resource.

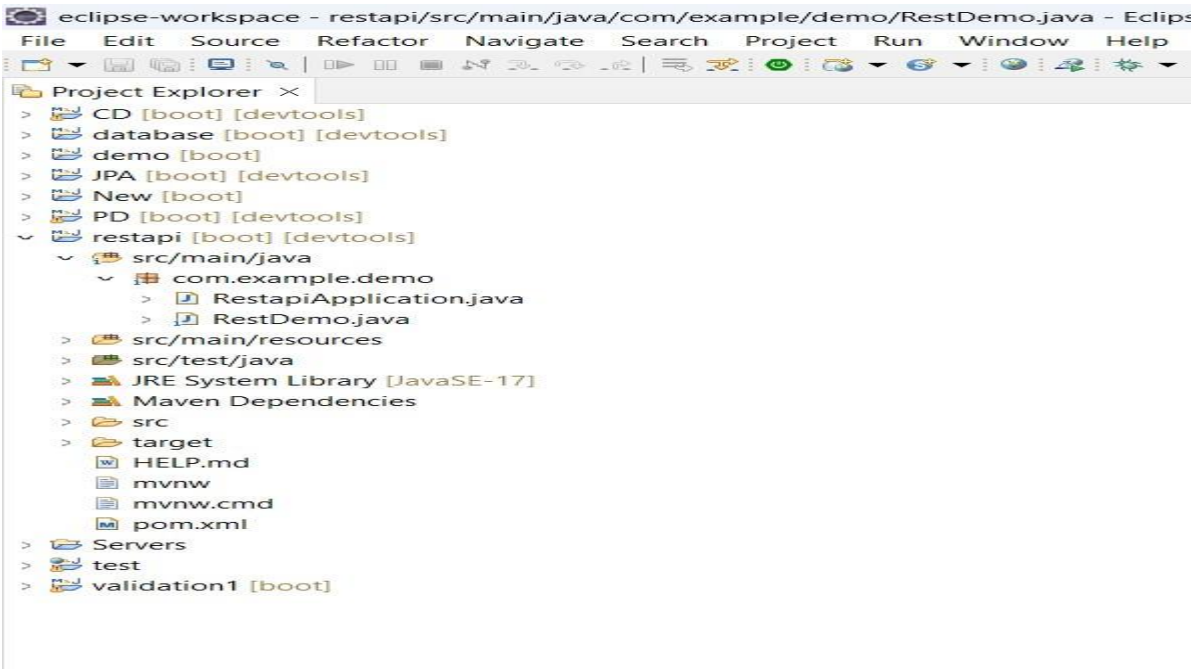
JPA – Java Persistent API

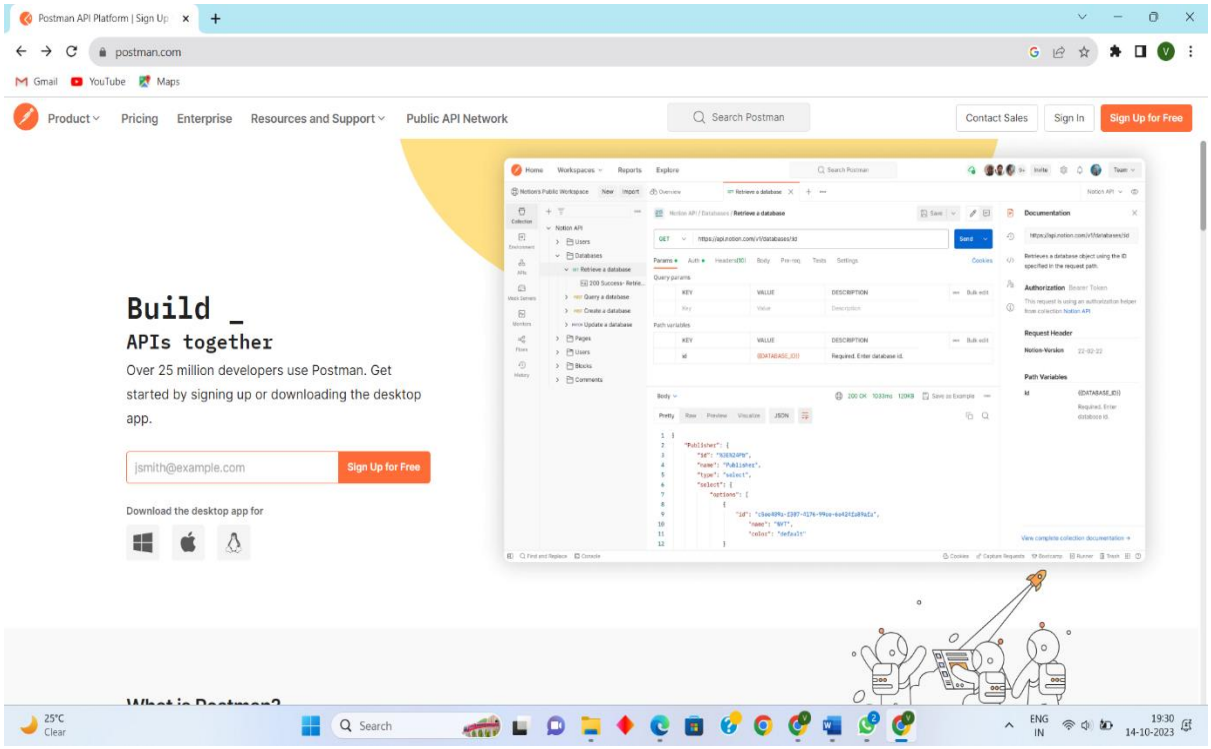
- The Java Persistence API (JPA) is a specification of Java. It is used to persist data between Java object and relational database.
- JPA acts as a bridge between object-oriented domain models and relational database systems.

RestDemo

```
package com.example.demo;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;
@RestController
public class RestDemo {
private int wins;
private int losses;
@RequestMapping(value="/score/update",method=RequestMethod.PUT)
public String updatescore(int wins, int losses)
	{
		this.wins=wins;
		this.losses=losses;
		return "wins="+wins+"losses="+losses;
	}
@RequestMapping(value="/score/delete",method=RequestMethod.DELETE)
public String deletescore()
	{
		this.wins=0;
		this.losses=0;
		return "wins="+wins+"losses="+losses;
	}
@RequestMapping(value="/score/losses",method=RequestMethod.POST)
public int increaselosses()
	{
		return losses++;
```

```
    }
    @RequestMapping(value="/score/wins",method=RequestMethod.POST)
    public int increasewins()
    {
        return wins++;
    }
    @RequestMapping(value="/score/wins",method=RequestMethod.GET)
    public int getwins()
    {
        return wins;
    }
    @RequestMapping(value="/score/losses",method=RequestMethod.GET)
    public int getlosses()
    {
        return losses;
    }
}
```

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APIs together
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jsmith@example.com
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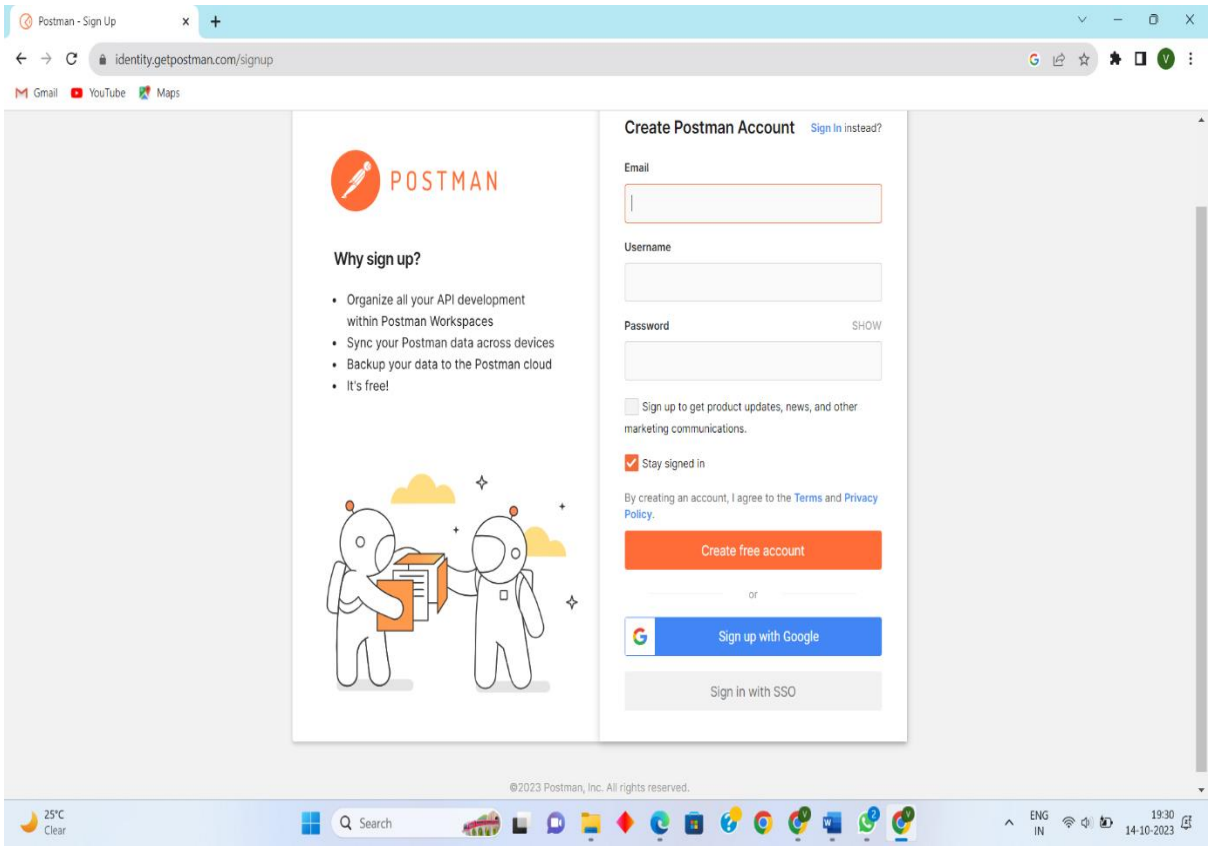
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POSTMAN
Why sign up?
Organize all your API development within Postman Workspaces
Sync your Postman data across devices
Backup your data to the Postman cloud
It's free!
Create Postman Account
Sign In instead?
Email
Username
Password
SHOW
Sign up to get product updates, news, and other marketing communications.
Stay signed in
By creating an account, I agree to the Terms and Privacy Policy.
Create free account
or
Sign up with Google
Sign in with SSO
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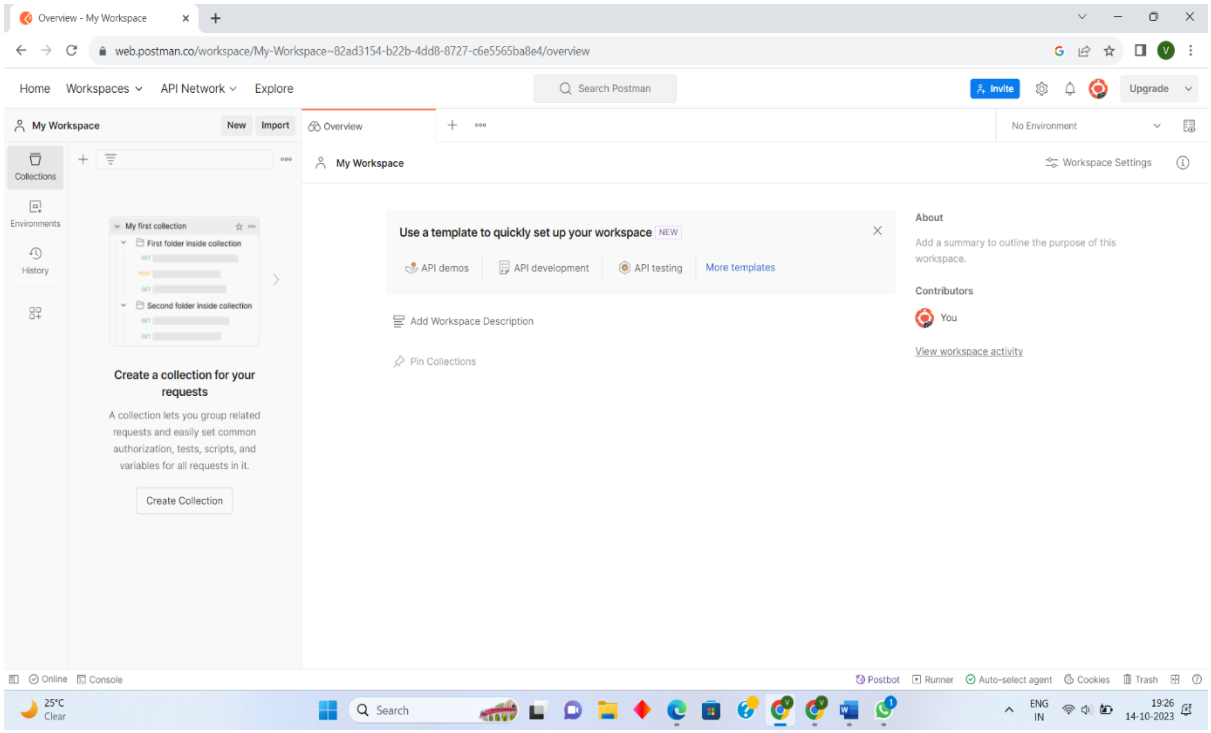
Overview - My Workspace
web.postman.co/workspace/My-Workspace~82ad3154-b22b-4dd8-8727-c6e5565ba8e4/overview
Home
Workspaces
API Network
Explore
Search Postman
Invite
Upgrade
My Workspace
New
Import
Overview
No Environment
Collections
Environments
History
My first collection
First folder inside collection
Second folder inside collection
Create a collection for your requests
A collection lets you group related requests and easily set common authorization, tests, scripts, and variables for all requests in it.
Create Collection
Use a template to quickly set up your workspace
API demos
API development
API testing
More templates
Add Workspace Description
Pin Collections
About
Add a summary to outline the purpose of this workspace.
Contributors
You
View workspace activity
Workspace Settings
Online
Console
Postbot
Runner
Auto-select agent
Cookies
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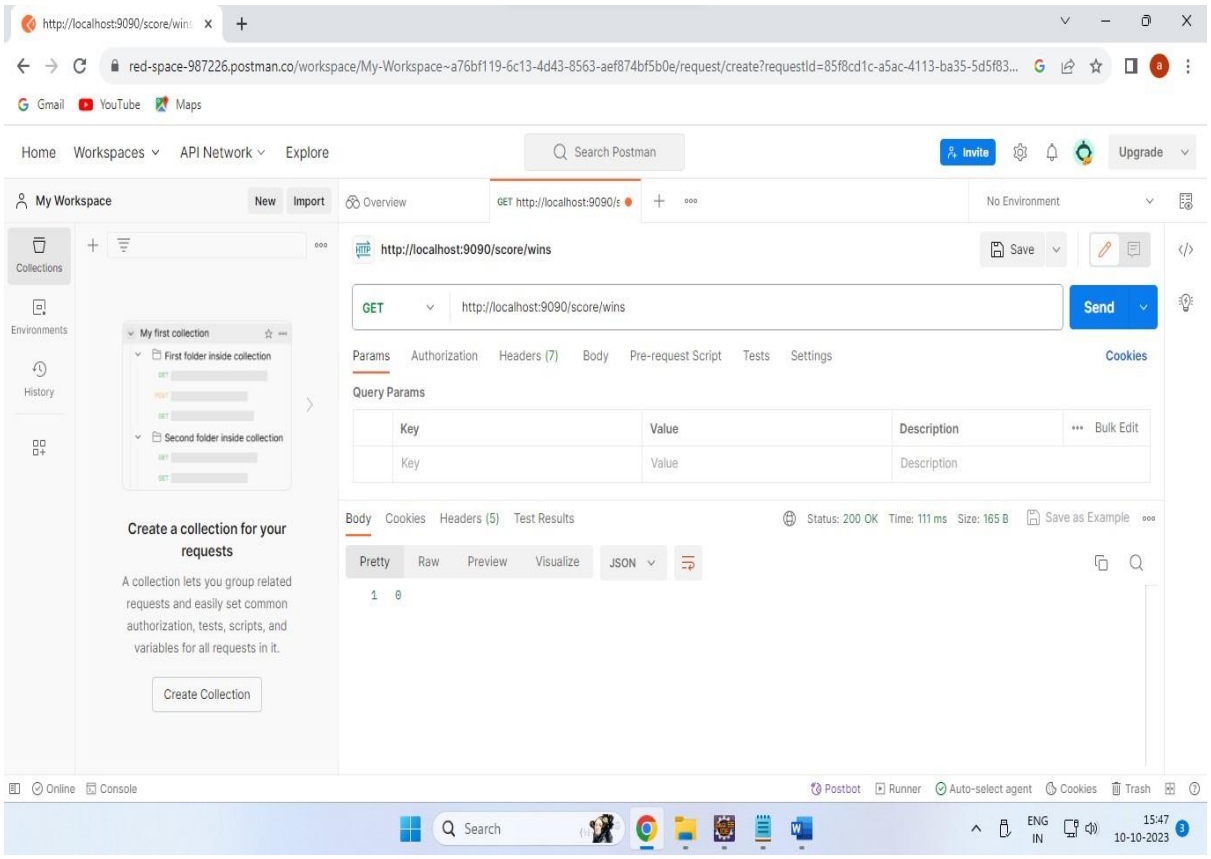
http://localhost:9090/score/wins
red-space-987226.postman.co/workspace/My-Workspace~a76bf119-6c13-4d43-8563-aef874bf5b0e/request/create?requestId=85f8cd1c-a5ac-4113-ba35-5d5f83...
Gmail
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Home
Workspaces
API Network
Explore
Search Postman
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Overview
GET http://localhost:9090/s
No Environment
Collections
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History
My first collection
First folder inside collection
Second folder inside collection
Create a collection for your requests
A collection lets you group related requests and easily set common authorization, tests, scripts, and variables for all requests in it.
Create Collection
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http://localhost:9090/score/wins
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Pre-request Script
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Bulk Edit
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Test Results
Status: 200 OK
Time: 111 ms
Size: 165 B
Save as Example
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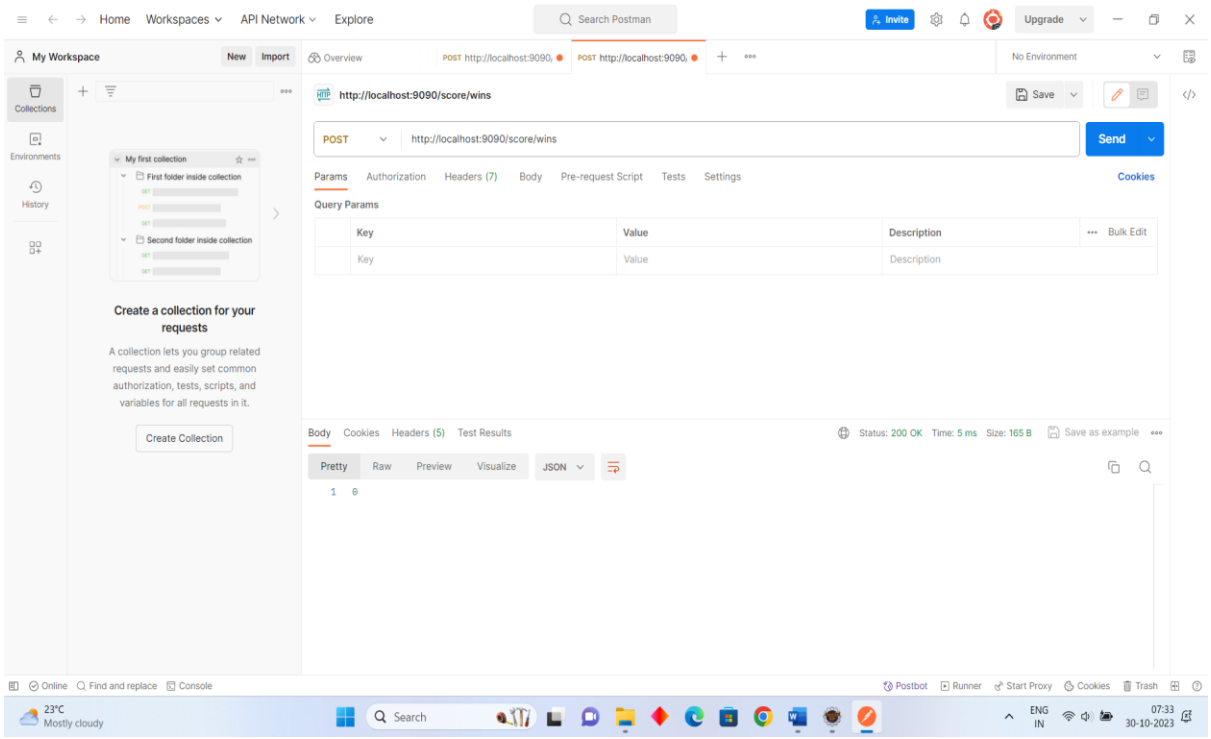
10-10-2023


Home
Workspaces
API Network
Explore
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POST http://localhost:9090/
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A collection lets you group related requests and easily set common authorization, tests, scripts, and variables for all requests in it.
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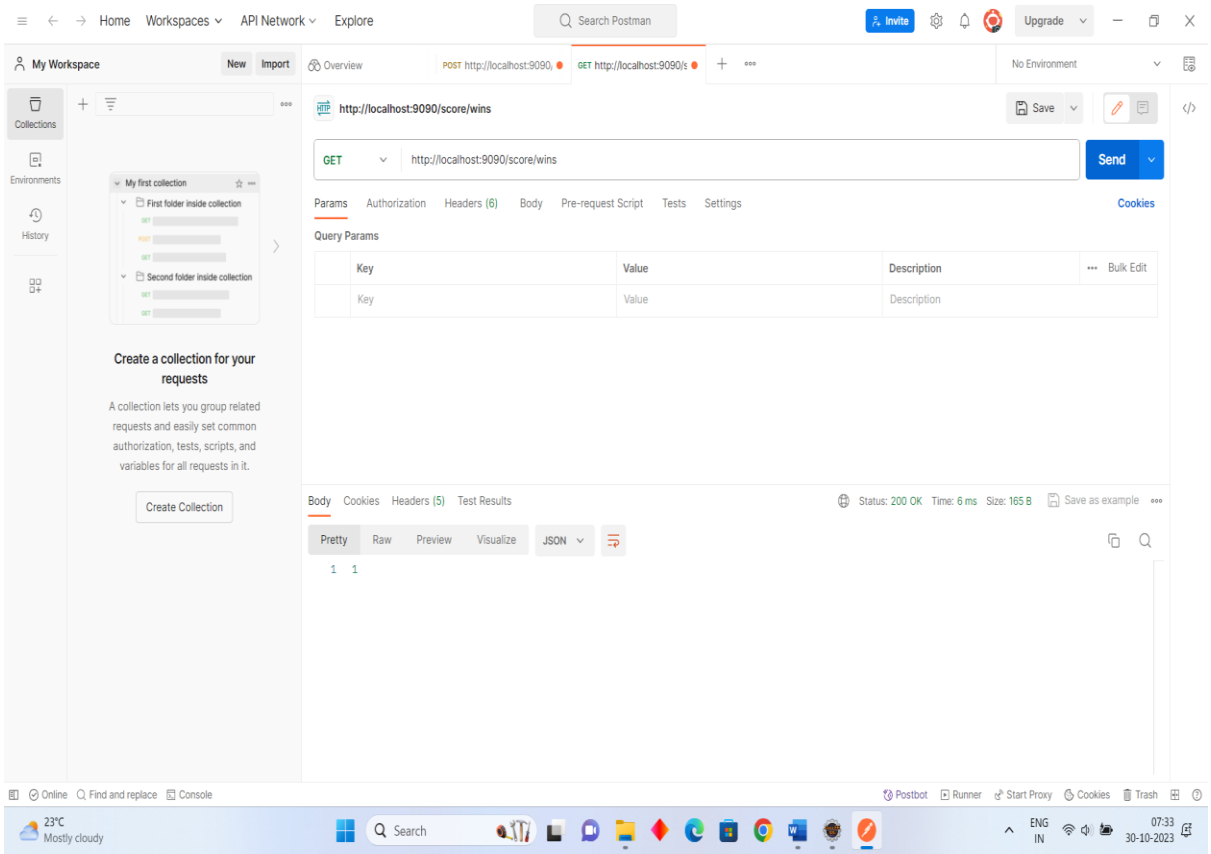
Home
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Upgrade
My Workspace
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Overview
POST http://localhost:9090/
GET http://localhost:9090/s
No Environment
Collections
Environments
History
http://localhost:9090/score/wins
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Headers (5)
Test Results
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Console
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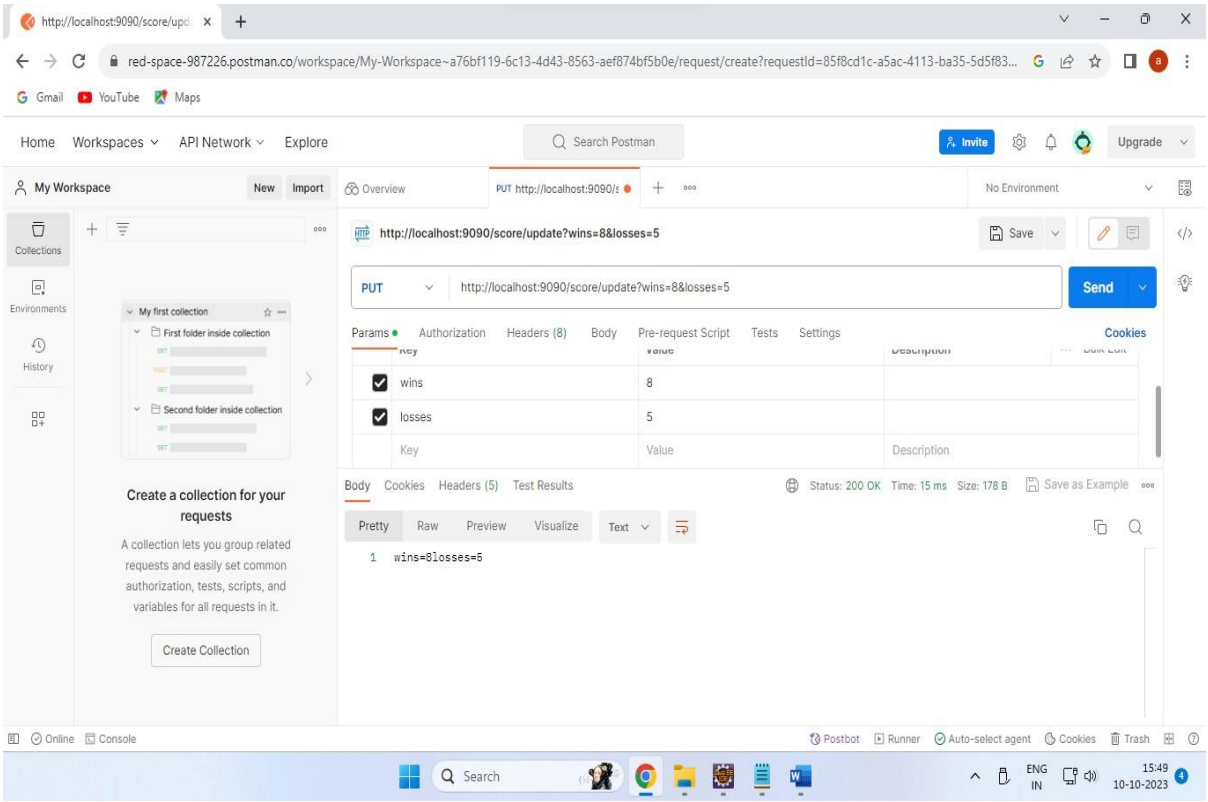
30-10-2023


http://localhost:9090/score/upd
red-space-987226.postman.co/workspace/My-Workspace~a76bf119-6c13-4d43-8563-aef874bf5b0e/request/create?requestId=85f8cd1c-a5ac-4113-ba35-5d5f83...
Gmail YouTube Maps
Home Workspaces API Network Explore
Search Postman
Invite Upgrade
My Workspace New Import
Overview
PUT http://localhost:9090/s
No Environment
Collections Environments History
http://localhost:9090/score/update?wins=8&losses=5
Save
PUT http://localhost:9090/score/update?wins=8&losses=5
Send
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies
wins 8
losses 5
Key Value Description
Body Cookies Headers (5) Test Results
Status: 200 OK Time: 15 ms Size: 178 B Save as Example
Pretty Raw Preview Visualize Text
1 wins=8losses=5
My first collection
First folder inside collection
Second folder inside collection
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A collection lets you group related requests and easily set common authorization, tests, scripts, and variables for all requests in it.
Create Collection
Online Console
Postbot Runner Auto-select agent Cookies Trash
Search
ENG IN
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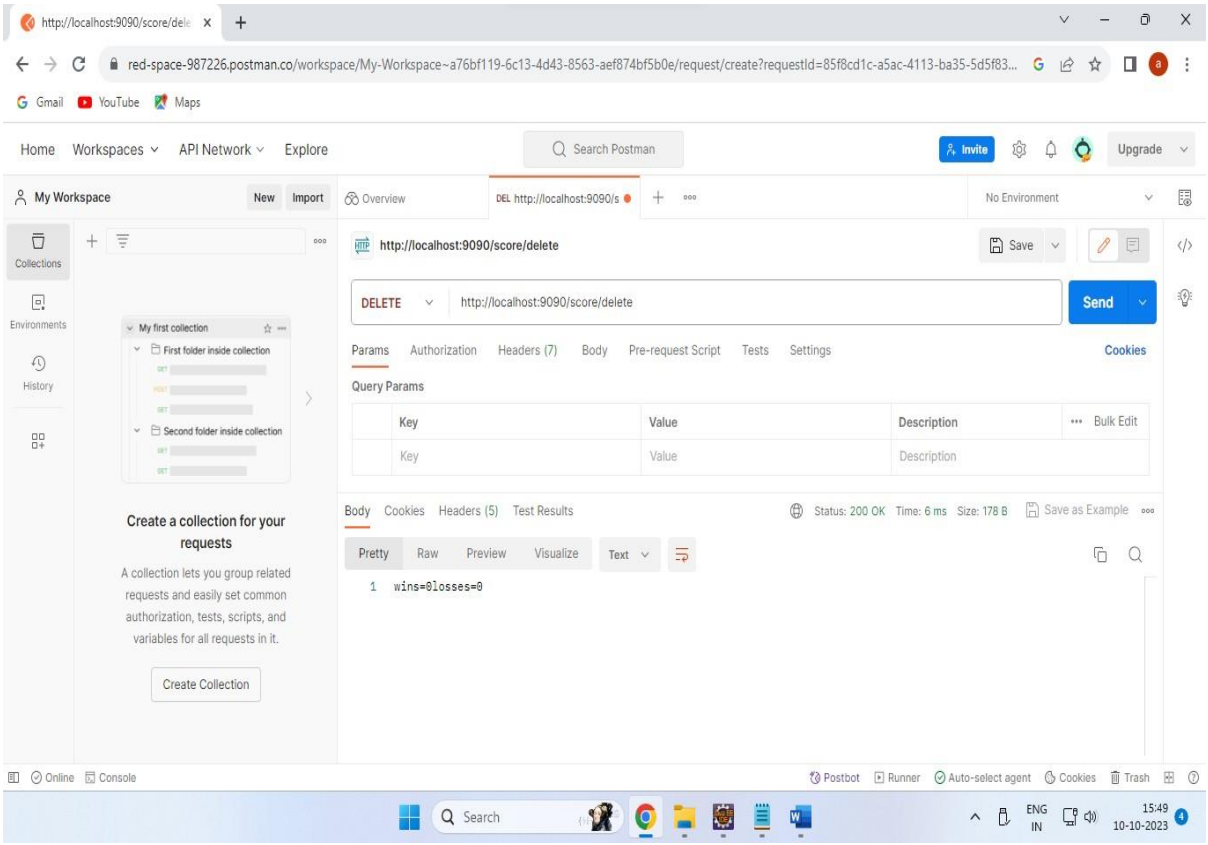
http://localhost:9090/score/dele
red-space-987226.postman.co/workspace/My-Workspace~a76bf119-6c13-4d43-8563-aef874bf5b0e/request/create?requestId=85f8cd1c-a5ac-4113-ba35-5d5f83...
Gmail YouTube Maps
Home Workspaces API Network Explore
Search Postman
Invite Upgrade
My Workspace New Import
Overview
DEL http://localhost:9090/s
No Environment
Collections Environments History
http://localhost:9090/score/delete
Save
DELETE http://localhost:9090/score/delete
Send
Params Authorization Headers (7) Body Pre-request Script Tests Settings
Cookies
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Key Value Description
Body Cookies Headers (5) Test Results
Status: 200 OK Time: 6 ms Size: 178 B Save as Example
Pretty Raw Preview Visualize Text
1 wins=0losses=0
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First folder inside collection
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Postbot Runner Auto-select agent Cookies Trash
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ENG IN
15:49 10-10-2023