Bharatiya Vidya Bhavan's
SARDAR PATEL INSTITUTE OF TECHNOLOGY
An Autonomous Institute Affiliated To University Of Mumbai
Munshi Nagar,Andheri (W) Mumbai 400 058

C.I.T.L. EXPERIMENT 4

Topic : Inventory Management System

Submitted By:

Akash Panicker	2021300089
Mahesh Patil	2021300095
Rohit Phalke	2021300100
Adwait Purao	2021300101

Submitted To:

Prof. Sunil Ghane

Aim:

Testing of restful web service using Postman/ARC.

Problem Statement:

Develop an inventory management system for a retail store that efficiently tracks and manages the inventory of products. The system should provide real-time updates on stock levels, generate alerts for low stock items, enable easy addition and removal of products, and offer insights into sales trends to optimize restocking decisions.

Theory:

- **What is Postman?**

  Postman is a popular application for API development and testing. It provides a user-friendly interface for sending and receiving HTTP requests, and it includes a variety of features that make it easy to debug and manage APIs.

- **Uses of Postman**

  Postman can be used for a variety of tasks, including:
    - Designing APIs: Postman can be used to design and document APIs.
    - Developing APIs: Postman can be used to develop and test APIs.
    - Testing APIs: Postman can be used to test APIs for functionality and performance.
    - Debugging APIs: Postman can be used to debug APIs by inspecting requests and responses.
    - Documenting APIs: Postman can be used to generate API documentation.

- **Benefits of Using Postman**

  There are many benefits to using Postman, including:
    - Easy to use: Postman has a user-friendly interface that makes it easy to use, even for beginners.
    - Powerful features: Postman includes a variety of powerful features that make it easy to debug and manage APIs.
    - Free to use: Postman is a free application that can be used by anyone.
    - Cross-platform: Postman is available for Windows, macOS, and Linux.

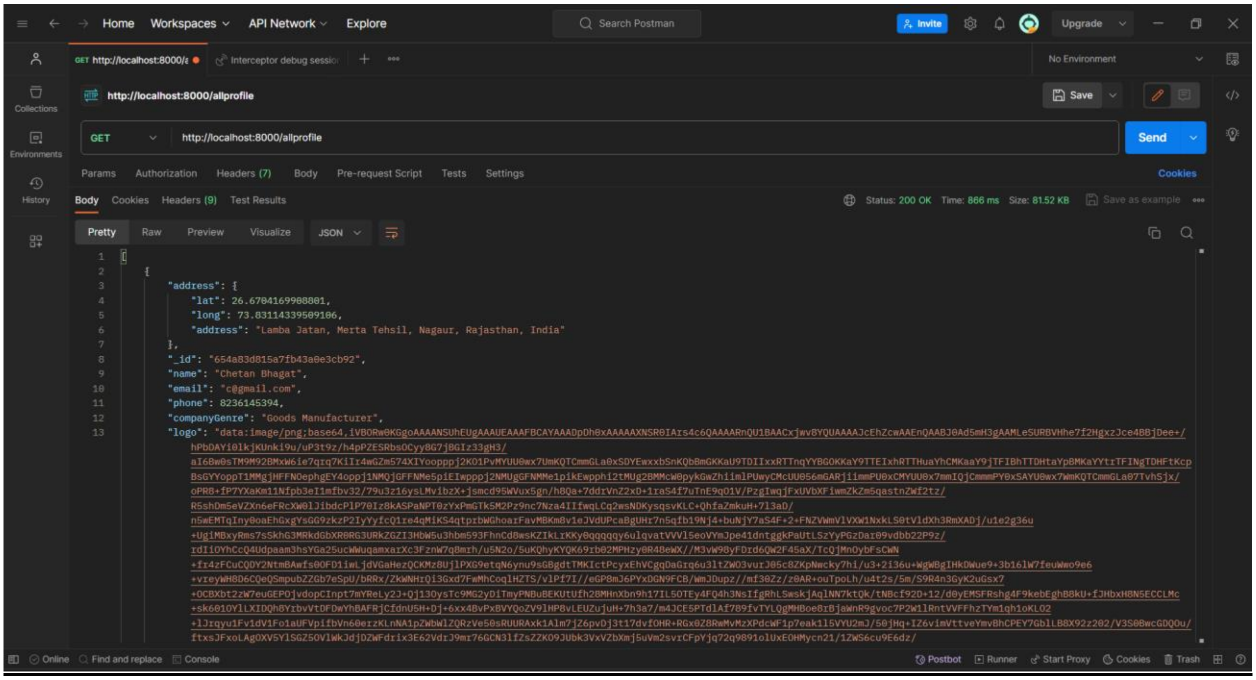
- **Types of Requests and Their Brief Descriptions**

  There are four main types of HTTP requests:
    - GET: The GET method is used to retrieve data from a resource.
    - POST: The POST method is used to submit data to a resource.
    - PUT: The PUT method is used to update data in a resource.
    - DELETE: The DELETE method is used to delete data from a resource.

  Postman also supports a variety of other HTTP methods, such as OPTIONS, PATCH, and HEAD.

Screenshots:

1. Making a GET request


Home
Workspaces
API Network
Explore
Search Postman
Invite
Upgrade
No Environment
Collections
Environments
History
Save
Send
Cookies
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
Headers (9)
Test Results
Save as example
Pretty
Raw
Preview
Visualize
JSON
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Trash

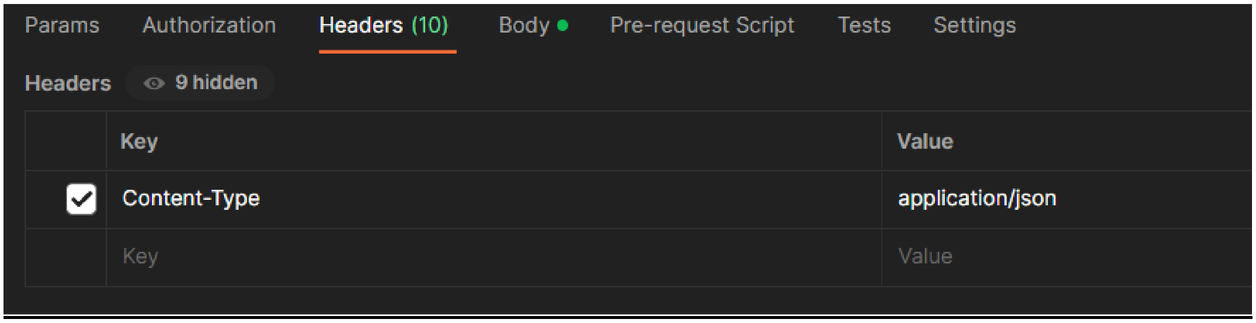
GET http://localhost:8000/allprofile

Status: 200 OK Time: 866 ms Size: 81.52 KB

```
[
    {
        "address": {
            "lat": 26.6704169908801,
            "long": 73.83114339509106,
            "address": "Lamba Jatan, Merta Tehsil, Nagaur, Rajasthan, India"
        },
        "_id": "654a83d815a7fb43a0e3cb92",
        "name": "Chetan Bhagat",
        "email": "c@gmail.com",
        "phone": 8236145394,
        "companyGenre": "Goods Manufacturer",
        "logo": "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAUEAAAFBCAYAAADpDh0xAAAAAXNSR0IArs4c6QAAAARnQU1BAACxjwv8YQUAAAAJcEhZcwAAEnQAABJ0Ad5mH3gAAMLeSURBVHhe7f2HgxzJce4BBjDee+/
```

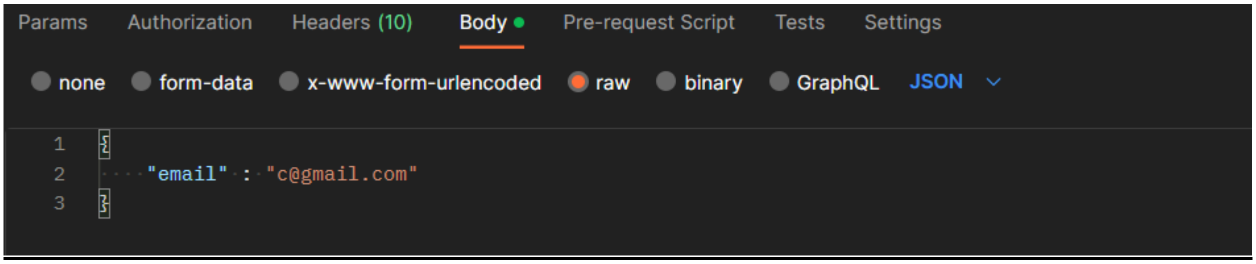
GET request

2. Making a POST request


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

	Key	Value
☑	Content-Type	application/json
	Key	Value

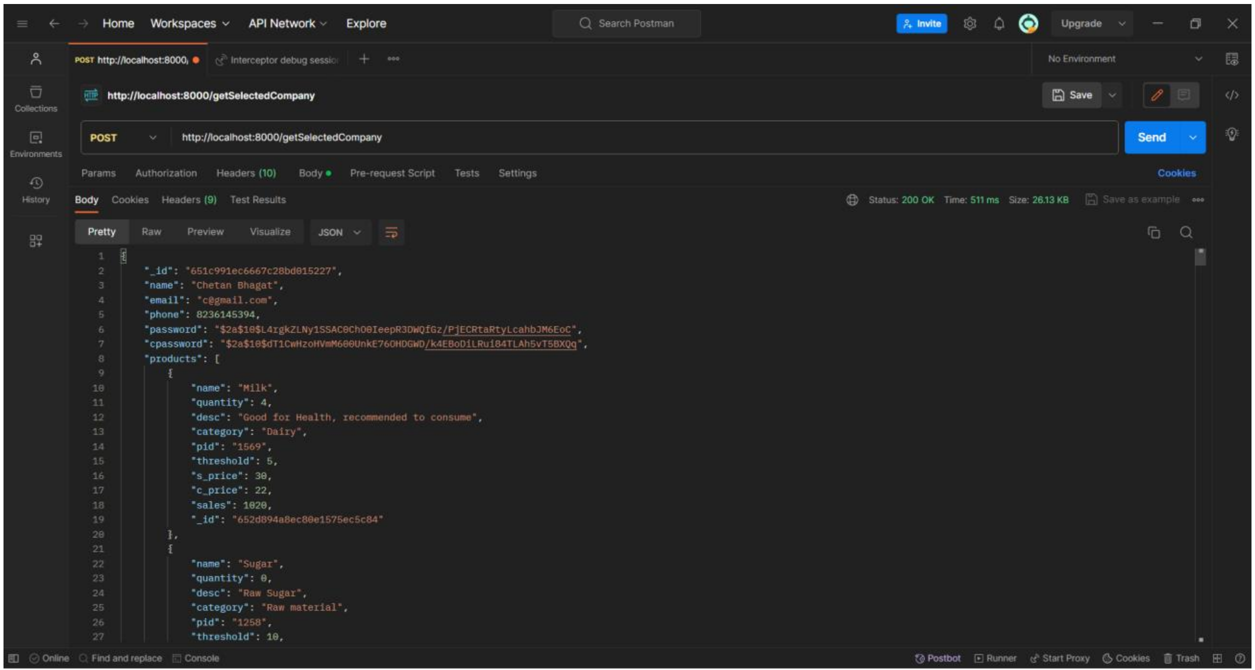
Added header to identify the format of data


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

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

```
{
    "email" : "c@gmail.com"
}
```

Added email in the body of request to send with the request


Home
Workspaces
API Network
Explore
Search Postman
Invite
Upgrade
No Environment
Collections
Environments
History
Save
Send
Params
Authorization
Headers (10)
Body
Pre-request Script
Tests
Settings
Cookies
Body
Cookies
Headers (9)
Test Results
Save as example
Pretty
Raw
Preview
Visualize
JSON
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Trash

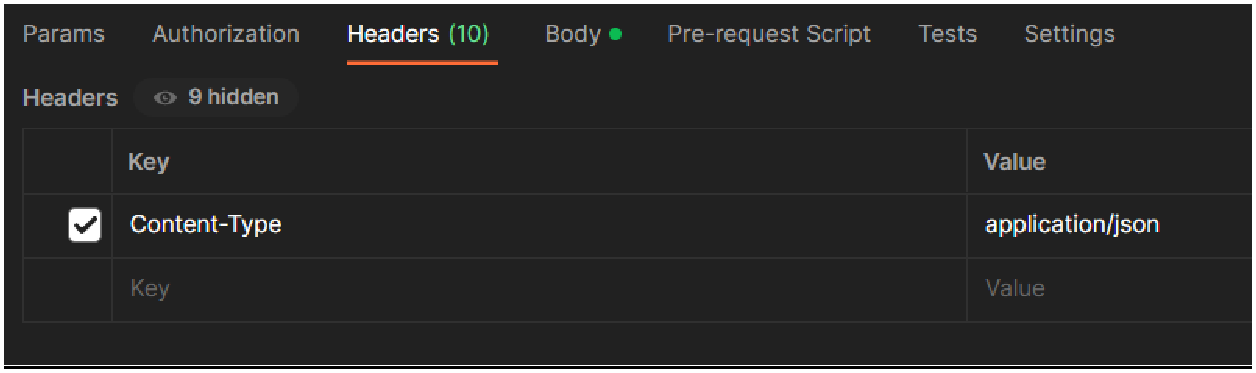
POST http://localhost:8000/getSelectedCompany

Status: 200 OK Time: 511 ms Size: 26.13 KB

```
{
    "_id": "651c991ec6667c28bd015227",
    "name": "Chetan Bhagat",
    "email": "c@gmail.com",
    "phone": 8236145394,
    "password": "$2a$10$L4rgkZLNy1SSAC0ChO0IeepR3DWQfGz/PjECRtaRtyLcahbJM6EoC",
    "cpassword": "$2a$10$dT1CwHzoHVmM600UnkE76OHDGWD/k4EBoDiLRu184TLAh5vT5BXQq",
    "products": [
        {
            "name": "Milk",
            "quantity": 4,
            "desc": "Good for Health, recommended to consume",
            "category": "Dairy",
            "pid": "1569",
            "threshold": 5,
            "s_price": 30,
            "c_price": 22,
            "sales": 1020,
            "_id": "652d894a8ec80e1575ec5c84"
        },
        {
            "name": "Sugar",
            "quantity": 0,
            "desc": "Raw Sugar",
            "category": "Raw material",
            "pid": "1258",
            "threshold": 10,
```

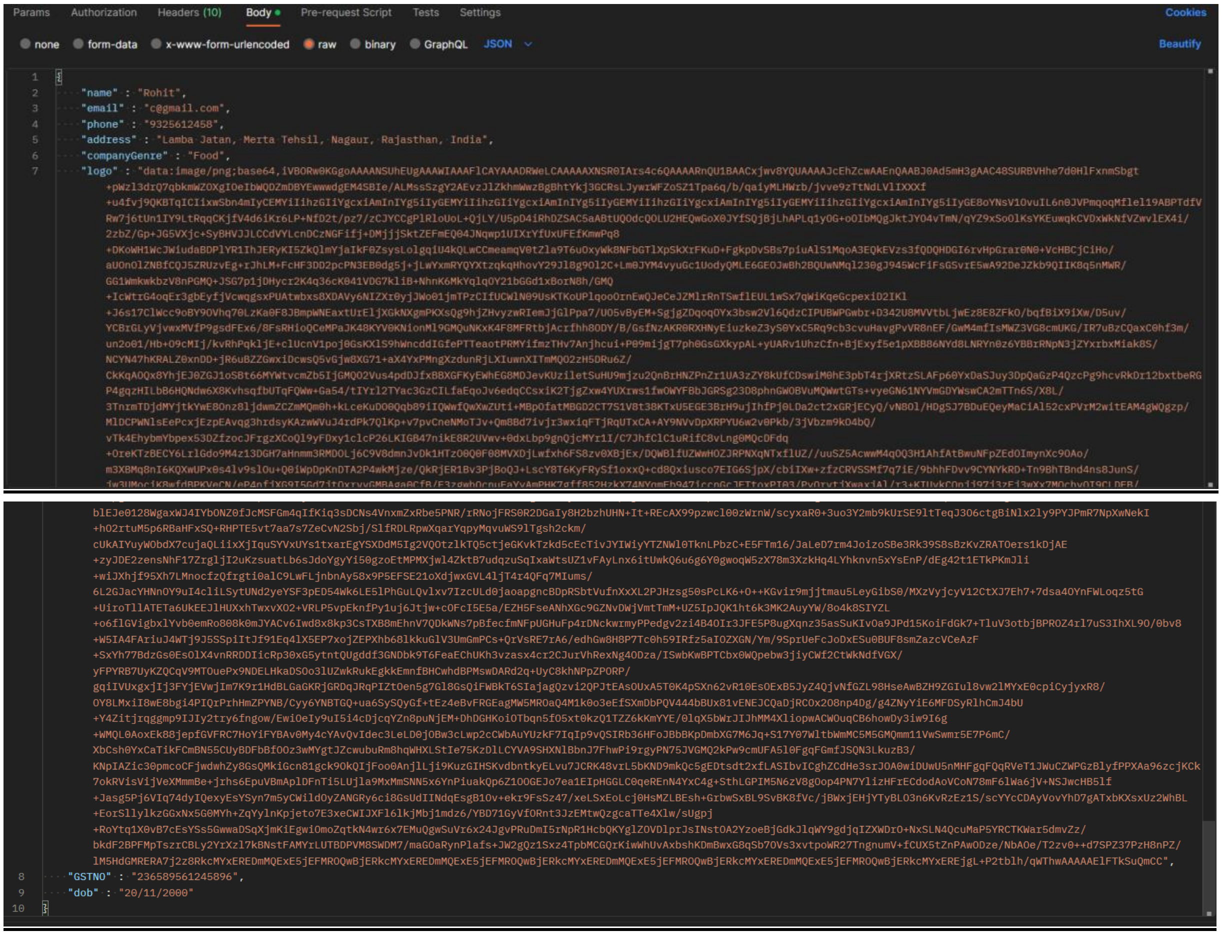
POST request

3. Making a PUT request


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

	Key	Value
☑	Content-Type	application/json
	Key	Value

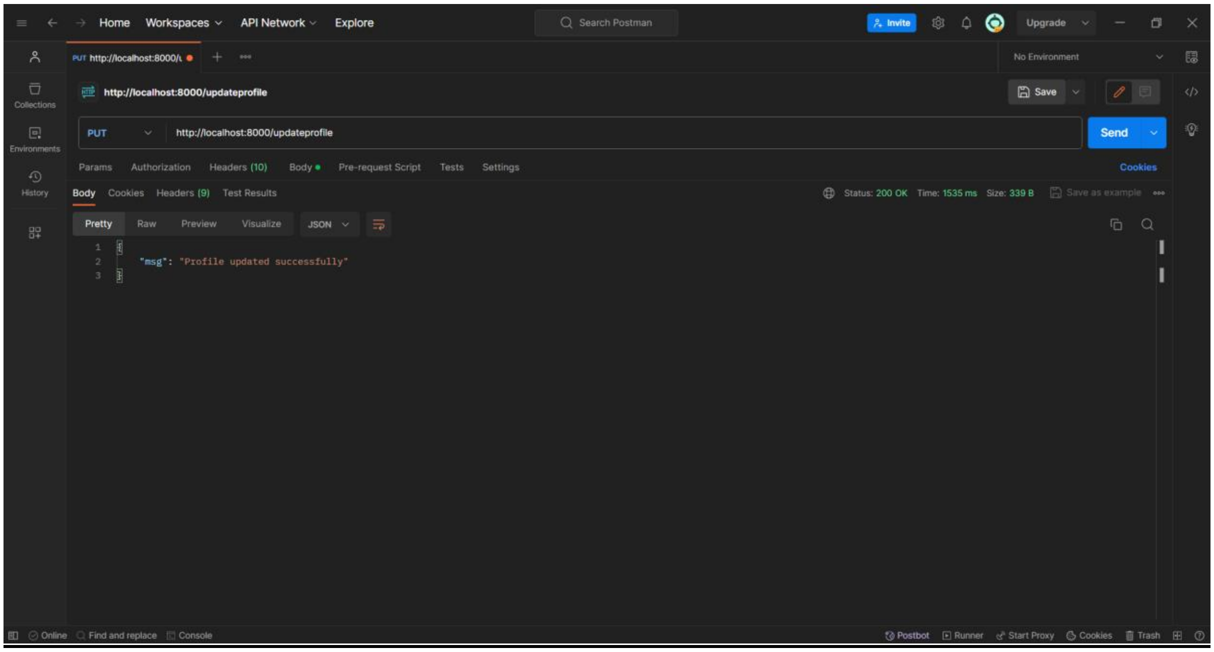
Added header to identify the format of data



```
{
    "name" : "Rohit",
    "email" : "c@gmail.com",
    "phone" : "9325612458",
    "address" : "Lamba Jatan, Merta Tehsil, Nagaur, Rajasthan, India",
    "companyGenre" : "Food",
    "logo" : "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAWIAAAFlCAYAAADRWeLCAAAAAXNSR0IArs4c6QAAAARnQU1BAACxjwv8YQUAAAAJcEhZcwAAEnQAABJ0Ad5mH3gAAC48SURBVHhe7d0HlFxnmSbgt
        +pWzl3drQ7qbkmWZOXgIOeIbWQDZmDBYEwwwdgEM4SBIe/ALMssSzgY2AEvzJlZkhmWwzBgBhtYkj3GCRsLJywrWFZoSZ1Tpa6q/b/qaiyMLHWrb/jvve9zTtNdLVlIXXXf
        +u4fvj9QKBTqICIixwSbn4mIyCEMYiIihzGIiYgcxiAmInIYg5iIyGEMYiIihzGIiYgcxiAmInIYg5iIyGEMYiIihzGIiYgcxiAmInIYg5iIyGEMYiIihzGIiYgcxiAmInIYg5iIyGE8oYNsV1OvuIL6n0JVPmqoqMflel19ABPTdfV
        Rw7j6tUn1IY9LtRqqCKjfV4d6iKr6LP+NfD2t/pz7/zCJYCCgPlRloUoL+QjLY/U5pD4iRhDZSAC5aABtUQOdcQOLU2HEQwGoX0JYfSQjBjLhAPLq1yOG+oOIbMQgJktJYO4vTmN/qYZ9xSoOlKsYKEuwqkCVDxWkNfVZwvlEX4i/
        2zbZ/Gp+JG5VXjc+SyBHVJJLCCdVYLcnDCzNGFifj+DMjjjSktZEFmEQ04JNqwp1UIXrYfUxUFEfKmwPq8
        +DKoWH1WcJWiudaBDPlYR1IhJERyKI5ZkQlmYjaIkF0ZsysLolgq1U4kQLwCCmeamqV0tZla9T6uOxyWk8NFbGTlXpSkXrFKuD+FgkpDvSBs7piuAlS1MqoA3EQkEVzs3fQDQHDGI6rvHpGrar0N0+VcHBCjCiHo/
        aUOnOlZNBfCQJ5ZRUzvEg+rJhLM+FcHF3DD2pcPN3EB0dg5j+jLWYxmRYQYXtzqkqHhovY29Jl8g9Ol2C+Lm0JYM4vyuGc1UodyQMLE6GEOJwBh2BQUwNMql230gJ945WcFiFsGSvrE5wA92DeJZkb9QIIK8q5nMWR/
        GG1WmkwkbzV8nPGMQ+JSG7p1jDHycr2K4q36cK041VDG7kliB+NhnK6MkYqlqOY21bGGd1xBorN8h/GMQ
        +IcWtrG4oqEr3gbEyfjVcwqgsxPUAtwbxs8XDAVy6NIZXr0yjJWo01jmTPzCIfUCWlN09UsKTKoUPlqooOrnEwQJeCeJZMlrRnTSwflEUL1wSx7qWiKqeGcpexiD2IKl
        +J6s17ClWcc9oBY9OVhq70LzKa0F8JBmpWNEaxtUrEljXGkNXgmPKXsQg9hjZHvyzwRIemJjGlPpa7/UO5vByEM+SgjgZDqoqOYx3bsw2Vl6QdzCIPUBWPGwbr+D342U8MVVtbLjwEz8E8ZFkO/bqfBiX9iXw/D5uv/
        YCBrGLyVjvwxMVfP9gsdFEx6/8FsRHioQCeMPaJK48KYV0KNionMl9GMQuNKxK4F8MFRtbjAcrfhh8ODY/B/GsfNzAKR0RXHNyEiuzkeZ3yS0YxC5Rq9cb3cvuHavgPvVR8nEF/GwM4mfIsMWZ3VG8cmUKG/IR7uBzCQaxC0hf3m/
        un2o01/Hb+O9cMIj/kvRhPqkljE+clUcnV1poj0GsKXlS9hWncddIGfePTTeaotPRMYifmzTHv7Anjhcui+P09mijgT7ph0GsGXkypAL+yUARv1UhzCfn+BjExyf5e1pXBB86NYd8LNRYn0z6YBBrRNpN3jZYxrbxMiak8S/
        NCYN47hKRALZ0xnDD+jR6uBZZGwxiDcwsQ5vGjw8XG71+aX4YxPMngXzdunRjLXIuwnXITmMQO2zH5DRu6Z/
        CkKqAOQx8YhjEJ0ZGJ1oSBt66MYWtvcmZb5IjGMQO2Vus4pdDJfxBBXGFKyEWhEG8MDJevKUziletSuHU9mjzu2QnBrHNZPnZr1UA3zZY8kUfCDswiM0hE3pbT4rjXRtzSLAFp60YxDaSJuy3DpQaGzP4QzcPg9hcvRkDr12bxtbeRG
        P4gqzHILbB6HQNdw6X8KvhsqfbUTqFQWw+Ga54/tIYrl2TYac3GzCILfaEqoJv6edqCCsxiK2TjgZxw4YUXrws1fwOWYFBbJGRSg23D8phnGWOBVuMQWwtGTs+vyeGN61NYVmGDYWswCA2mTTn6S/X8L/
        3TnrmTDjdMYjtkYwE8Onz8ljdwmZCZmMQm0h+kLceKuDO0Qqb89iIQWwfQwXwZUti+MBpOfatMBGD2CT7S1V8t38KTxU5EGE3BrH9ujIhfPj0LDa2ct2xGRjECyQ/vN8Ol/HDgSJ7BDuEQeyMaCiAl52cxPVrM2witEAM4gWQgzp/
        MlDCPWNlsEePcxjEzpEAvqg3hrdsyKAzwWVuJ4rdPk7QlKp+v7pvCneNMoTJv+QmBBd7ivjr3wxiqFTjRqUTxCA+AY9NVvDpXRPYU6w2v0Pkb/3jVbzm9kO4bQ/
        vTk4EhybmYbpex53DZfzocJFrgzXCoQl9yFDxy1clcP26LKIGB47nikE8R2UVwv+0dxLbp9gnQjcMYr1I/C7JhfClC1uRifC8vLng0MQcDFdq
        +OreKTzBECY6LrlGdo9M4z13DGH7aHnmm3RMDOLj6C9V8dmnJvDk1HTzO0Q0F08MVXDjLwfxh6FS8zv0XBjEx/DQWBlfUZWwHOZJRPNXqNTxflUZ//uuSZ5AcwwM4qOQ3H1AhfAtBwuNFpZEdOImynXc9OAo/
        m3XBMq8nI6KQXwUPx0s4lv9slOu+Q0iWpDpKnDTA2P4wkMjze/QkRjER1Bv3PjBoQJ+LscY8T6KyFRySf1oxxQ+cd8Qxiusco7EIG6SjpX/cbiIXw+zfzCRVSSMf7q7iE/9bhhFDvv9CYNYkRD+Tn9BhTBnd4ns8JunS/
```

```
        blEJe0128WgaxWJ4IYbONZ0fJcMSFGm4qIfKiq3sDCNs4VnxmZxRbe5PNR/rRNojFRS0R2DGaIy8H2bzhUHN+It+REcAX99pzwcl00zWrnW/scyxaR0+3uo3Y2mb9kUrSE9ltTeqJ3O6ctgBiNlx2ly9PYJPmR7NpXwNekI
        +hO2rtuM5p6RBaHFxSQ+RHPTE5vt7aa7s7ZeCvN2Sbj/SlfRDLRpwXqarYqpyMqvuWS9lTgsh2ckm/
        cUkAIYuyWObdX7cujaQLiixXjIquSYVxUYs1txarEgYSXDdM5Ig2VQOtzlkTQ5ctjeGKvkTzkd5cEcTivJYIWiyYTZNWl0TknLPbzC+E5FTm16/JaLeD7rm4JoizoSBe3Rk39S8sBzKvZRATOers1kDjAE
        +zyJDE2zensNhF17ZrgljI2uKzsuatLb6sJdoYgyYi50gzoEtMPMXjwl4ZktB7udqzuSqIxaWtsUZ1vFAyLnx6itUwkQ6u6g6Y0gwoqW5zX78m3XzkHq4LYhknvn5xYsEnP/dEg42t1ETkPKmJli
        +wiJXhjf95Xh7LMnocfzQfrgti0alC9LwFLjnbnAy58x9P5EFSE21oXdjwxGVL4ljT4r4QFq7MIums/
        6L2GJacYHNnOY9uI4cliLSytUNd2yeYSF3pED54Wk6LE5lPhGuLQvlxv7IzcULd0jaoapgncBDpRSbtVufnXxXL2PJHzsg50sPcLK6+O++KGvir9mjjtmau5LeyGibS0/MXzVyjcyV12CtXJ7Eh7+7dsa4OYnFWLoqz5tG
        +UiroTllATETa6UkEEJlHUXxhTwxvXO2+VRLP5vpEknfPy1uj6Jtjw+cOFcI5E5a/EZH5FseANhXGc9GZNvDWjVmtTmM+UZ5IpJQK1ht6k3MK2AuyYW/8o4k8SIYZL
        +o6flGVigbxlYvb0emRo808k0mJYACv6Iwd8x8kp3CsTXB8mEhnV7QDkWNs7pBfecfmNFpUGHuFp4rDNckwrmyPPedgv2zi4B4OIr3JFE5P8ugXqnz35asSuKIvOa9JPd15KoiFdGk7+TluV3otbjBPROZ4rl7uS3IhXL9O/0bv8
        +W5IA4FAriuJ4WTj9J5SSpiItJf91Eq4lX5EP7xojZEPXhb68lkkuGlV3UmGmPCs+QrVsRE7rA6/edhGw8H8P7Tc0h59IRfz5aIOZXGN/Ym/9SprUeFcJoDxESu0BUF8smZazcVCeAzF
        +SxYh77BdzGs0EsOlX4vnRRDDIicRp30xG5ytntQUgddf3GNDbk9T6FeaEChUKh3vzasx4cr2CJurVhRexNg4ODza/ISwbKwBPTCbx0WQpebw3jiyCWf2CtWkNdfVGX/
        yFPYRB7UyKZQCqV9MTOuePx9NDELHkaDSOo3lUZwkRukEgkkEmnfBHCwhdBPMswDARd2q+UyC8khNPpZPORP/
        gqiIVUxgxjIj3FYjEVwjIm7K9r1HdBLGaGKRjGRDqJRqPIZtOen5g7Gl8GsQiFWBkT6SIajagQzvi2QPJtEAsOUxA5T0K4pSXn62vR10EsOExB5JyZ4QjvNfGZL98HseAwBZH9ZGIul8vw2lMYxE0cpiCyjyxR8/
        OY8LMxiI8wE8bgi4PIQrPrhHmZPYNB/Cyy6YNBTGQ+ua6SySQyGf+tEz4eBvFRGEagMW5MROaQ4M1k0o3eEfSXmDbPQV444bBUx81vENEJCQaDjRCOx2O8np4Dg/g4ZNyYiE6MFDSyRlhCmJ4bU
        +Y4Zitjrqggmp9IJIy2try6fngow/EwiOeIy9uI5i4cDjcqYZn8puNjEM+DhDGHKoiOTbqn5fO5xt0kzQ1TZZ6kKmYYE/0lqX5bWrJIJhMM4XliopwACWOuqCB6howDy3iw9I6g
        +WMQL0AoxEk88jepfGVFRC7HoYiFYBAv0My4cYAvQvIdec3LeLD0jOBw3cLwp2cCWbAuYUzkF7IqIp9vQSIRb36HFoJBbBKpDmbXG7M6Jq+S17Y07WltbWmMC5M5GMQmm11VwSwmr5E7P6mC/
        XbCsh0YxCaTikFCmBN55CUyBDFbBfOOz3wMYgtJZcwubuRm8hqWHXLStIe75KzDlLCYVA9SHXNlBbnJ7FhwPi9rgyPN75JVGMQ2kPw9cmUFA5l0FgqFGmfJSQN3LkuzB3/
        KNpIAZic30pmcoCFjwdwhZy8GsQMkiGcn81gck9OkQIjFoo0AnjlLji9KuzGIHSKvdbntkyELvu7JCRK48vrL5bKND9mkQc5gEDtsdt2xfLASIbvICghZCdHe3srJOA0wiDUwU5nMHFgqFQqRVeT1JWuCZWPGzBlyfPPXAa96zcjKCk
        7okRVisVijVeXMmmBe+jrhs6EpuVBmAplDFnTi5LUjla9MxMmSNN5x6YnPiuakQp6Z1OOGEJo7ea1EIpHGGLC0qeREnN4YxC4g+SthLGPIM5N6zV8gOop4PN7YlizHFrECdodAoVCoN78mF6lWa6jV+NSJwcHB5lf
        +Jasg5Pj6VIq74dyIQexyEsYSyn7m5yCWildOyZANGRy6ci8GsUdIINdqEsgB1Ov+ekr9FsSz47/xeLSxEoLcj0HsMZLBEsh+GrbwSxBL9SvBK8fVc/jBWxjEHjYTyBLO3n6KvRzEz1S/scYYcCDAyVovYhD7gATxbKXsxUz2WhBL
        +EorSllylkzGGxNx5G0MYh+ZqYylnKpjeto7E3xeCWIJXFl6lkjMbj1mdz6/YBD71GyVfORnt3JzEMtwQzgcaTTe4Xlw/sUgpj
        +RoYtq1X0vB7cEsYSs5GwwaDSqXjmKiEgwiOmoZqtkN4wr6x7EMuQgwSuVr6x24JgvPRuDmI5rNpR1HcbQKYglZOVDlprJsINstOA2YzoeBjGdkJlqWY9gdjqIZXWDrO+NxSLN4QcuMaP5YRCTKWar5dmvZz/
        bkdF2BPFMpTszrCBLy2YrXzl7kBNstFAMYrLUTBDPVM8SWDM7/maGOaRynPlafs+JW2gQz1Sxz4TpbMCGQrKiwWhUvAxbshKDmBwxG8qSb7OVs3xvtpoWR27TngnumV+fCUX5tZnPAwODze/NbAOe/T2zv0++d7SPZ37PzH8nPZ/
        lM5HdGMRERA7j2z8RkcMYxEREDmMQExE5jEFMROQwBjERkcMYxEREDmMQExE5jEFMROQwBjERkcMYxEREDmMQExE5jEFMROQwBjERkcMYxEREDmMQExE5jEFMROQwBjERkcMYxEREjgL+P2tblh/qWThwAAAAAElFTkSuQmCC",
    "GSTNO" : "236589561245896",
    "dob" : "20/11/2000"
}
```

Added data in the body of request to send with the request



PUT http://localhost:8000/updateprofile

Status: 200 OK Time: 1535 ms Size: 339 B

```
{
    "msg": "Profile updated successfully"
}
```

PUT request

Conclusion:

Postman has emerged as a powerful and versatile API development platform that has revolutionized the way APIs are designed, developed, and tested. Its user-friendly interface, comprehensive features, and wide range of integrations make it an indispensable tool for both API developers and consumers. Postman's ability to streamline the API development process, facilitate collaboration, and ensure API quality has made it a staple in the modern software development landscape.