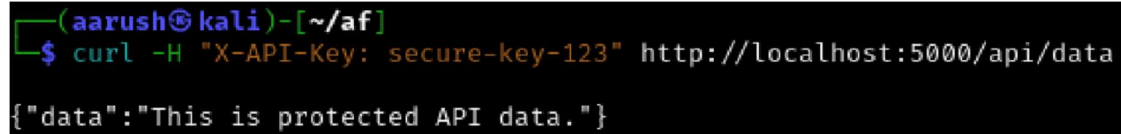


## 5.PROJECT DEMO

Using Curl to send API requests with malicious body to test the firewall

### 5.1 Normal Packet

Cmd: curl -H "X-API-Key: secure-key-123" <http://localhost:5000/api/data>

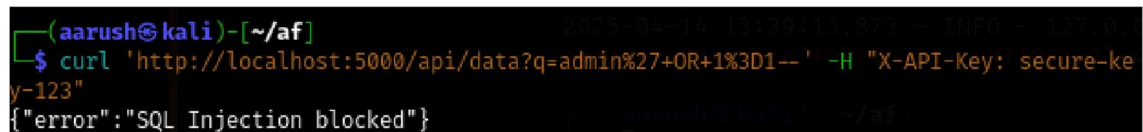


```
(aarush@kali)-[~/af]
$ curl -H "X-API-Key: secure-key-123" http://localhost:5000/api/data
{"data":"This is protected API data."}
```

Fig 5.1 Normal Output

### 5.2 SQL Injection

Cmd: curl 'http://localhost:5000/api/data?q=admin%27+OR+1%3D1--' -H "X-API-Key: secure-key-123"



```
(aarush@kali)-[~/af]
$ curl 'http://localhost:5000/api/data?q=admin%27+OR+1%3D1--' -H "X-API-Key: secure-key-123"
{"error":"SQL Injection blocked"}
```

Fig 5.2 Output With Error- SQL Injection

### 5.3 Cross-Site Scripting (XSS)

Cmd: curl 'http://localhost:5000/api/data?q=<script>alert("hacked")</script>' -H "X-API-Key: secure-key-123"

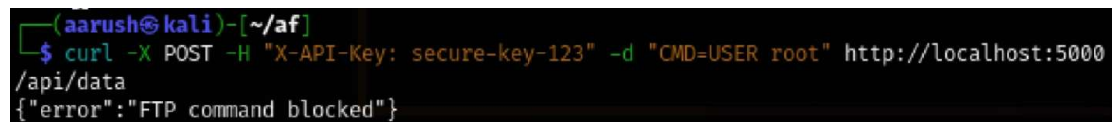


```
(aarush@kali)-[~/af]
$ curl 'http://localhost:5000/api/data?q=<script>alert("hacked")</script>' -H "X-API-Key: secure-key-123"
{"error":"XSS attack blocked"}
```

Fig 5.3 Output With Error- XSS Injection

### 5.4 File Transfer Protocol Command (FTP)

Cmd: curl -X POST -H "X-API-Key: secure-key-123" -d "CMD=USER root" <http://localhost:5000/api/data>



```
(aarush@kali)-[~/af]
$ curl -X POST -H "X-API-Key: secure-key-123" -d "CMD=USER root" http://localhost:5000/api/data
{"error":"FTP command blocked"}
```

Fig 5.4 Output With Error- FTP Command