

CURL COMMANDS

1. To find the location of the curl program in your system “where curl” is used.
2. To find the version of curl “curl --version” is used.
3. GET -> To send a get request to a URL we just write curl followed by the url, it generates the file html file of the given url.

[illegible]

4. -o -> This saves the output from the get request to the url.
5. -I -> This gives the header of the given url.

```
C:\Users\User>curl -o urlOutput https://www.google.com/
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           % Done    0     0         0             0      0      0      0
100 20939  0 20939    0 25184    0 --:--:-- --:--:-- --:--:-- 25227

C:\Users\User>curl -I https://www.google.com/
HTTP/1.1 200 OK
Content-Type: text/html; charset=ISO-8859-1
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-vAdnbJ1fSDXpc3wLZiCbwp' 'strict-dynamic' 'report-sample' 'unsafe-eval' 'unsafe-inline';https://report-uri https://csp.withgoogle.com/csp/gws/other-hp
P3P: CP="This is not a P3P policy! See g.co/p3phelp for more info."
Date: Thu, 31 Aug 2023 05:57:30 GMT
Server: gws
X-XSS-Protection: 0
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Expires: Thu, 31 Aug 2023 05:57:30 GMT
Cache-Control: private
Set-Cookie: 1P_JAR=2023-08-31-05; expires=Sat, 30-Sep-2023 05:57:30 GMT; path=/; domain=.google.com; Secure
Set-Cookie: AEC=A4d49MHVjEnYj_MVSieyWkZc0Boc3Vvz06Hg2-_wEutB-VirYl33RXx-Rq; expires=Tue, 27-Feb-2024 05:57:30 GMT; path=/; domain=.google.com; Secure; HttpOnly; SameSite=lax
Set-Cookie: NID=511-pneVv0s10o-r_RXN9NHxvZMIzT3zWJLhF7K11mktZHCv30AtI7XUG-NMF5sqFxpaf3k8I8zqpuS2zo18vvKUj1FABUQedrYSLKH3mMB8RrBE-zrChnq7ANT1R-t8710TAF38NunhzprZaUVfNlFMzBroit5qTigC4cklpegg; expires=Fri, 01-Mar-2024 05:57:30 GMT; path=/; domain=.google.com; HttpOnly
Alt-Svc: h3=":443"; ma=2592000,h3-29=":443"; ma=2592000

C:\Users>User>
```

6. -O -> This saves the output from the get request to the url and save with the given name instead of using a custom name.

7. --limit-rate -10k -> This will limit the download rate.

8. -C -> It is used to continue the download of the file.

```
C:\Users\user>curl -O https://mirrors.nxtgen.com/ubuntu-mirror/ubuntu-releases/22.04.3/ubuntu-22.04.3-desktop-amd64.iso
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total             Spent    Left     Speed
  0 4804M    0 1279k    0     0  312k      0  4:22:47  0:00:04  4:22:43   312k^C
C:\Users\user>curl --limit-rate 100K -O https://mirrors.nxtgen.com/ubuntu-mirror/ubuntu-releases/22.04.3/ubuntu-22.04.3-desktop-amd64.iso
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total             Spent    Left     Speed
  0 4804M    0 2927k    0     0  100k      0  13:36:45  0:00:29  13:36:16  62761^C
C:\Users\user>curl -C - -O https://mirrors.nxtgen.com/ubuntu-mirror/ubuntu-releases/22.04.3/ubuntu-22.04.3-desktop-amd64.iso
** Resuming transfer from byte position 3325693
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total             Spent    Left     Speed
  0 4801M    0 367k    0     0  53278      0  26:14:51  0:00:07  26:14:44  56899^C
C:\Users\user>
```

9. -L -> By default redirects are not followed in curl so if we want to follow the redirects we use this.

10. -a -> This is used to append the output of the file to an existing one.

11. -v -> Sometimes referred as verbose mode this allows to view request headers and connection information of the url. Request data, response headers, and other information about the request, such as the IP used and the SSL handshake process, are all included in the output.

```
C:\Users\user>curl -v https://www.google.com/
Trying [2404:6800:4009:825::2004]:443...
Connected to www.google.com (2404:6800:4009:825::2004) port 443 (#0)
schannel: disabled automatic use of client certificate
ALPN: offers http/1.1
ALPN: server accepted http/1.1
using HTTP/1.1
GET / HTTP/1.1
Host: www.google.com
User-Agent: curl/8.0.1
Accept: */*

HTTP/1.1 200 OK
Date: Thu, 31 Aug 2023 06:44:08 GMT
Expires: -1
Cache-Control: private, max-age=0
Content-Type: text/html; charset=ISO-8859-1
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-9TtV-C7i0Fl4YMZ1ktqj8g' 'strict-dynamic' 'report-sample' 'unsafe-eval' 'unsafe-inline' https://http://report-uri https://csp.withgoogle.com/csp/gws/other-hp
P3P: CP="This is not a P3P policy! See g.co/p3phelp for more info."
Server: gws
X-XSS-Protection: 0
X-Frame-Options: SAMEORIGIN
Set-Cookie: 1P_JAR=2023-08-31-06; expires=Sat, 30-Sep-2023 06:44:08 GMT; path=/; domain=.google.com; Secure
Set-Cookie: AEC=Ad49MVHmT9BUga3V0kApQedrZGqyZqH9zdgANba0aIwe7hdoTD-yS_CXGA; expires=Tue, 27-Feb-2024 06:44:08 GMT; path=/; domain=.google.com; Secure; HttpOnly; SameSite=lax
Set-Cookie: NID=511=psG7uyfI3TiInXC8ZW_3yTEAPnQXaoH3hKknlYXy5KwbZIRiQCU9isR4ztyXoiX1C5P1GX8BA_Wx-LlvauWvPLUGcJfq4TjnzIUJFpRhZSLhcdaJswREADJxIT-tuXGfa3fZzNFIZIUMTowP18gU55WYwGr4WKJpruEGDXK-w; expires=Fri, 01-Mar-2024 06:44:08 GMT; path=/; domain=.google.com; HttpOnly
Alt-Svc: h3="442"; ma=2592000,h3-29="443"; ma=2592000
Accept-Ranges: none
Vary: Accept-Encoding
Transfer-Encoding: chunked

<!doctype html><html itemscope="" itemtype="http://schema.org/WebPage" lang="en-IN"><head><meta content="text/html; charset=UTF-8" http-equiv="Content-Type"><meta content="images/branding/googleg/1x/googleg_standard_color_128dp.png" itemprop="image"><title>Google</title><script nonce="9TtV-C7i0Fl4YMZ1ktqj8g">(function(){var _g=(kEI:'0BwZPChIryn5OUP6teluMAQ',kEXPI:'0,1359409,6058,207,4804,2316,383,246,5,1129120,1197789,612,380090,16114,19397,9287,22431,1361,12319,17580,4998,17075,38444,887,1985,2891,8349,3405,606,29843,30847,2614,13721,1014,1,16916,2652,4,3832,29062,13065,13658,27032,6642,7596,1,42154,2,16737,23024,5679,1020,31122,4568,6256,23421,1252,25135,8,7921,2,2,1,10957,15675,8155,7381,2,15968,873,10635,5,1922,9779,22893,15785,3781,20198,20137,14,82,13332,6874,8377,3787,4264,10937,5375,2266,764,3034,3076,9706,1804,7734,562,991,2,8487,10260,2172,5249,8199,7948,892,4652,949,545,3147,5227,3339,1991,5777,146,5769,1884,1743,3346,3,9,4129,1271,976,1437,1179,5210139,2,196,46,197,5994622,280311,3,3311,141,795,19735,1,1,346,8263,111,31,32,10,23942037,579,4043528,16672,39283,1621,641,1123,1397272,23759270,887,2436,1852,2,2777,1,208,10336,630,2079,2878,45,2639,24,35,1708,1478,3245,241,1967,2949,941,1050,1374,1689,14,283,2389,671,68,1596,1,476,267,638,1160,382,2111,264,2,3,3226,482,1253,1087,3,284,3251,111,3108,891,354,9,191,482,100,4,375,61,2,2,338,24,40,5,16,3,1423,393,493,2,498,101,194,49,1494,744,220,47,1506,155,3979,894,185,699,881,229,511,2,680,277,241,835,297,380,881,712,475,3,249,225,17
```

12. -vo -> When we don't want the body and just save the output of the headers and to a null device.

```
Command Prompt
100 75537 100 75537 0 0 32661 0 0:00:02 0:00:02 --:--:-- 32714
* Connection #0 to host www.atatus.com left intact

C:\Users\User>curl -vo NUL https://www.google.com/
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
* Connected to www.google.com (2404:6800:4009:825::2004) port 443 (#0)
* schannel: disabled automatic use of client certificate
* ALPN: offers http/1.1
* ALPN: server accepted http/1.1
* using HTTP/1.1
> GET / HTTP/1.1
> Host: www.google.com
> User-Agent: curl/8.0.1
> Accept: */*
>
< HTTP/1.1 200 OK
< Date: Thu, 31 Aug 2023 06:49:15 GMT
< Expires: -1
< Cache-Control: private, max-age=0
< Content-Type: text/html; charset=ISO-8859-1
< Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-vKJoKUa7gTruAC1yRvw' 'strict-dynamic' 'report-sample' 'unsafe-eval' 'unsafe-inline' https: http:report-uri https://csp.withgoogle.com/csp/gws/other-hp
< P3P: CP="This is not a P3P policy! See g.co/p3phelp for more info."
< Server: gws
< X-XSS-Protection: 0
< X-Frame-Options: SAMEORIGIN
< Set-Cookie: 1D_3AR=2023-08-31-06; expires=Sat, 30-Sep-2023 06:49:15 GMT; path=/; domain=.google.com; Secure
< Set-Cookie: AEC=Ad49MVEgHyRcrFkdmXg8FNIvM1CxHjRkjt1KtMTkyb-fM438QUevJf3Q; expires=Tue, 27-Feb-2024 06:49:15 GMT; path=/; domain=.google.com; Secure; HttpOnly; SameSite=lax
< Set-Cookie: NID=511-EtL8-1trH18Xuh245VZI00-B1bW6Uye18dOumwo2YQoaq-PRUvtSQ-13QtmSUTjcM1uE5nyPHI_XkcBMHgmV9JvJECgrW5Yoth8TnPoVdTGBtZHgBzKgquAP43IY4vLR98FvKL3MRuXyOf__0xaVnHQFID-V0110AP1IaznrQoc; expires=Fri, 01-Mar-2024 06:49:15 GMT; path=/; domain=.google.com; HttpOnly
< Alt-Svc: h3=":443"; ma=2592000,h3-29=":443"; ma=2592000
< Accept-Ranges: none
< Vary: Accept-Encoding
< Transfer-Encoding: chunked
* schannel: failed to decrypt data, need more data
{ [17989 bytes data]
100 20885 0 20885 0 0 23519 0 --:--:-- --:--:-- --:--:-- 23572
* Connection #0 to host www.google.com left intact
```

13. -H -> Used to setup the custom header for a url.

```
Command Prompt

C:\Users\user>
C:\Users\user>curl -H 'My-ANSU-Custom-Header: 123' https://httpbin.org/get
curl: (3) URL using bad/illegal format or missing URL
{
  "args": {},
  "headers": {
    "Accept": "*/*",
    "Host": "httpbin.org",
    "User-Agent": "curl/8.0.1",
    "X-Amzn-Trace-Id": "Root=1-64f03be0-617eb92e139ed90b02910df2"
  },
  "origin": "122.163.56.204",
  "url": "https://httpbin.org/get"
}

C:\Users\user>
```

14. --data -> It is used to send a POST request to the server and send the data.

```
Command Prompt

C:\Users\user>curl --data "firstname=Ansu" https://httpbin.org/post
{
  "args": {},
  "data": "",
  "files": {},
  "form": {
    "firstname": "Ansu"
  },
  "headers": {
    "Accept": "*/*",
    "Content-Length": "14",
    "Content-Type": "application/x-www-form-urlencoded",
    "Host": "httpbin.org",
    "User-Agent": "curl/8.0.1",
    "X-Amzn-Trace-Id": "Root=1-64f03c61-1904da7d1c1dbeee0a30eefd"
  },
  "json": null,
  "origin": "122.163.56.204",
  "url": "https://httpbin.org/post"
}

C:\Users\user>
```

15. -X -H -> Sending JSON data to the server using POST.

```
Command Prompt

C:\Users\user>curl -X POST -H "Content-Type: application/json" -d '{"Name": "Ansu"}' https://httpbin.org/post
{
  "args": {},
  "data": "{Name: Ansu}",
  "files": {},
  "form": {},
  "headers": {
    "Accept": "*/",
    "Content-Length": "12",
    "Content-Type": "application/json",
    "Host": "httpbin.org",
    "User-Agent": "curl/8.0.1",
    "X-Amzn-Trace-Id": "Root=1-64f03e60-5db0d9ce47e2a94d74f548b7"
  },
  "json": null,
  "origin": "122.163.56.204",
  "url": "https://httpbin.org/post"
}
```

16. -sSo -> Manually verifying the Http requests.

```
file1 - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html lang=en>
<meta charset=utf-8>
<meta name=viewport content="initial-scale=1, minimum-scale=1, width=device-width">
<title>Error 404 (Not Found)!!</title>
<style>
  *{margin:0;padding:0}html,code{font:15px/22px arial,sans-serif}html{background:#fff;color:#222;padding:15px}body{margin:
r_150x54dp.png) no-repeat;-webkit-background-size:100% 100%}}#logo{display:inline-block;height:54px;width:150px}
</style>
<a href=//www.google.com/><span id=logo aria-label=Google></span></a>
<p><b>404.</b><ins>That's an error.</ins>
<p>The requested URL <code>/404</code> was not found on this server. <ins>That's all we know.</ins>
```

17. -v --ssl3 -> Checking if the server supports a specific protocol.

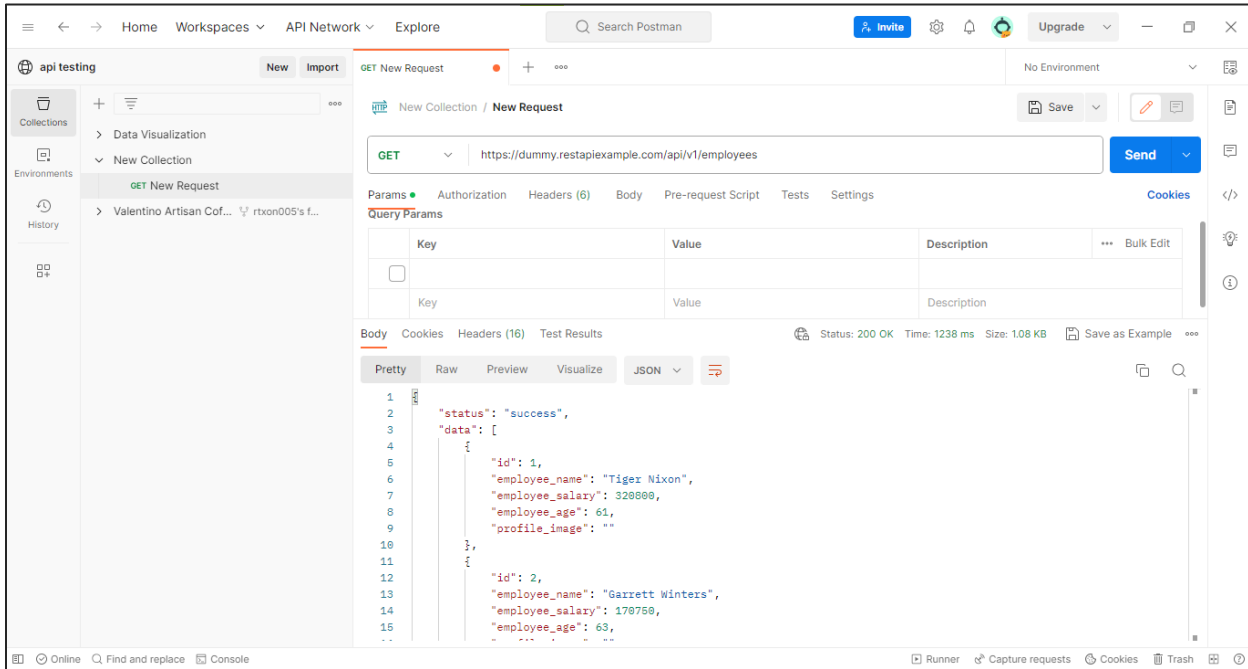
```
Command Prompt

C:\Users\user>curl -v --ssl3 https://www.google.com/
Warning: Ignores instruction to use SSLv3
* Trying [2404:6800:4009:80e::2004]:443...
* Connected to www.google.com (2404:6800:4009:80e::2004) port 443 (#0)
* schannel: disabled automatic use of client certificate
* ALPN: offers http/1.1
* ALPN: server accepted http/1.1
* using HTTP/1.1
> GET / HTTP/1.1
> Host: www.google.com
> User-Agent: curl/8.0.1
> Accept: */*
>
* schannel: failed to decrypt data, need more data
* schannel: failed to decrypt data, need more data
< HTTP/1.1 200 OK
< Date: Thu, 31 Aug 2023 09:45:37 GMT
< Expires: -1
< Cache-Control: private, max-age=0
< Content-Type: text/html; charset=ISO-8859-1
< Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-Azr1CnmSQVhEIIzFI6KzQ' 'strict-dynamic' 'report-sample' 'unsafe-eval' 'unsafe-inline' https://report-uri https://csp.withgoogle.com/csp/gws/other-hp
< P3P: CP="This is not a P3P policy! See g.co/p3phelp for more info."
< Server: gws
< X-XSS-Protection: 0
< X-Frame-Options: SAMEORIGIN
< Set-Cookie: IP_JAR=2023-08-31-09; expires=Sat, 30-Sep-2023 09:45:37 GMT; path=/; domain=.google.com; Secure
< Set-Cookie: AEC=A4949MVKPpRwT3s1wGGQd41dYUxB17g98PJ5zmK-UzC821Pj_B3uHK; expires=Tue, 27-Feb-2024 09:45:37 GMT; path=/; domain=.google.com; Secure; HttpOnly; SameSite=lax
< Set-Cookie: NID=511-taDu0fLFTN2mbuOpSAwGs4PM3g-k38iFLHieUCU3ie9x4-bX8IYVR_1mOuUu7t0dIvLQ9P_FAGb8baJbZpf-G2zTy7PJA_f4Q2hKrxt5La1v37L0pKUDABeLeZnvDH8qIOaxk5V0zb-tr4P4JWGf07J1lCj5rS8ZT215136K3MG; expires=Fri, 01-Mar-2024 09:45:37 GMT; path=/; domain=.google.com; HttpOnly
< Alt-Svc: h3="443"; ma=2592000,h3-29="443"; ma=2592000
< Accept-Ranges: none
< Vary: Accept-Encoding
< Transfer-Encoding: chunked
<
<!doctype html><html itemscope="" itemtype="http://schema.org/WebPage" lang="en-IN"><head><meta content="text/html; charset=UTF-8" http-equiv="Content-Type"><meta content="images/branding/google/1x/google_standard_color_128dp.png" itemprop="image"><title>Google</title><script nonce="AZr1CnmSQVhEIIzFI6KzQ">(function){var _g=(key:"QmWzLudC7yz1s0P1aut2Ag",keyPI:"0.1359409,6058,207,4804,2316,383,246,5,1129120,1197743,380747,16115,28684,22431,1361,12311,17588,4998,17075,6885,31559,2872,2891,11754,606,29843,825,19391,10631,16105,230,1014,1,16916,2652,4,3832,29062,13065,13658,4437,22610,6627,7596,1,42154,2,16737,23024,5679,1020,31123,4567,6256,23421,1252,25135,8,7921,2,2,1,10957,13669,2006,8155,7381,2,15967,873,19634,7,1922,9779,20640,21819,20199,20136,14,82,13333,6873,8377,3787,4261,10912,579,4824,3030,6110,9706,1804,7734,5622,450,2262,4943,12086,7421,8199,283,3,7661,893,868,4733,545,3147,8566,1992,5922,5769,3626,3347,3,9,3689,440,1271,976,1437,1179,5203197,6942,2,195,47,196,5994623,2803118,3452,795,2,19733,1,1,346,7640,820,34,45,23942037,579,2737885,1322315,30263,2262,1754,1306641,23759270,806,7064,1,212,84,3337,6915,629,2079,2079,1595,1089,2465,3185,3244,2
```

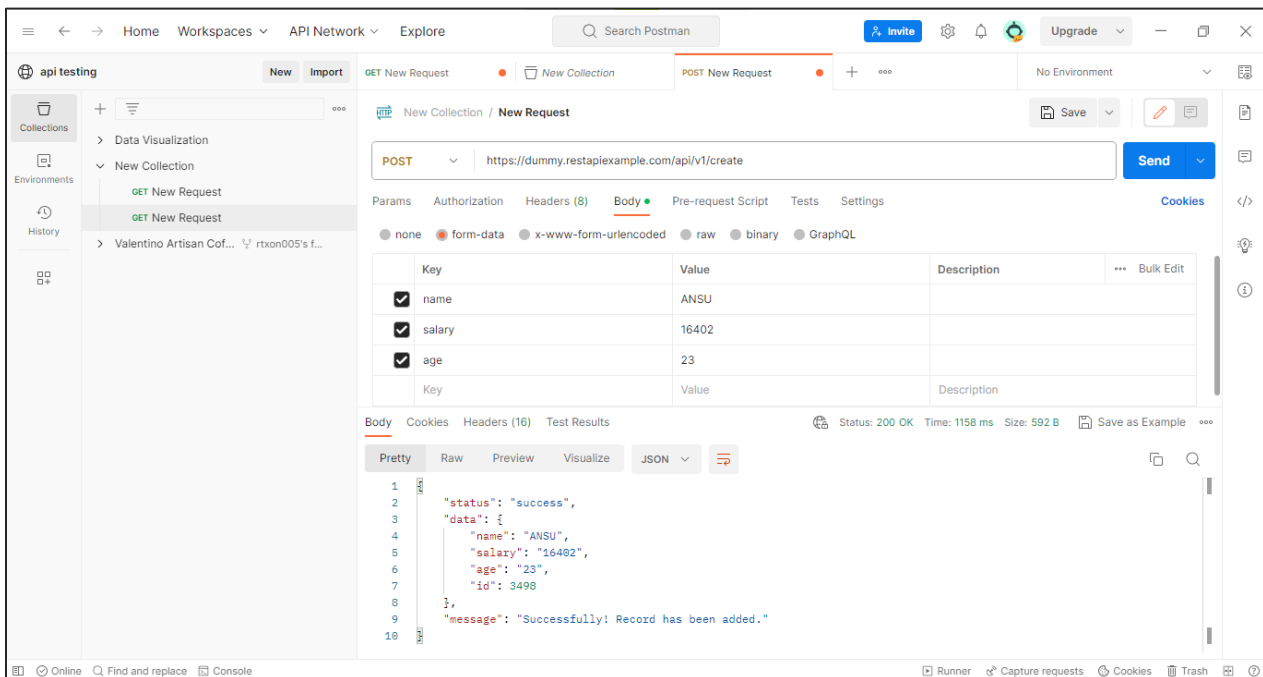

[illegible]

POSTMAN

1. GET



2. POST



3. PUT

The screenshot shows the Postman interface with a PUT request configured. The URL is `https://jsonplaceholder.typicode.com/posts/1`. The request body is a JSON object: `{ "title": "Ansu", "Operation_Status": "Good" }`. The response status is 200 OK, with a time of 384 ms and a size of 1005 B. The response body is a JSON object: `{ "title": "Ansu", "Operation_Status": "Good", "id": 1 }`.

```
PUT https://jsonplaceholder.typicode.com/posts/1

{
  "title": "Ansu",
  "Operation_Status": "Good"
}
```

Status: 200 OK Time: 384 ms Size: 1005 B

```
{
  "title": "Ansu",
  "Operation_Status": "Good",
  "id": 1
}
```

4. PATCH

The screenshot shows the Postman interface with a PATCH request configured. The URL is `https://jsonplaceholder.typicode.com/posts/1`. The request body is a JSON object: `{ "Operation_Status": "Very Good" }`. The response status is 200 OK, with a time of 373 ms and a size of 1.22 KB. The response body is a JSON object: `{ "userId": 1, "id": 1, "title": "sunt aut facere repellat provident occaecati excepturi optio reprehenderit", "body": "quia et suscipit\nsuscipit recusandae consequuntur expedita et cum\nreprehenderit molestiae ut ut quas totam\nnostrum rerum est autem sunt rem eveniet architecto" }`.

```
PATCH https://jsonplaceholder.typicode.com/posts/1

{
  "Operation_Status": "Very Good"
}
```

Status: 200 OK Time: 373 ms Size: 1.22 KB

```
{
  "userId": 1,
  "id": 1,
  "title": "sunt aut facere repellat provident occaecati excepturi optio reprehenderit",
  "body": "quia et suscipit\nsuscipit recusandae consequuntur expedita et cum\nreprehenderit molestiae ut ut quas totam\nnostrum rerum est autem sunt rem eveniet architecto"
}
```

5. DELETE

The screenshot shows the Postman interface with a DELETE request configured. The URL is `https://jsonplaceholder.typicode.com/posts/1`. The request is successful, returning a 200 OK status with a response time of 775 ms and a size of 921 B. The response body is empty, as indicated by the message "This request does not have a body".

Request Details:

- Method: DELETE
- URL: `https://jsonplaceholder.typicode.com/posts/1`
- Body: This request does not have a body

Response Details:

- Status: 200 OK
- Time: 775 ms
- Size: 921 B

6. HEAD

The screenshot shows the Postman interface with a HEAD request configured. The URL is `https://jsonplaceholder.typicode.com/posts/1`. The request is successful, returning a 200 OK status with a response time of 587 ms and a size of 933 B. The response headers are displayed in the bottom panel.

Request Details:

- Method: HEAD
- URL: `https://jsonplaceholder.typicode.com/posts/1`

Response Headers:

Key	Value	Description
Report-To	<code>{\"endpoints\": [{\"url\": \"https://a.nel.cloudflare.com/report/v3?s=fhl9vcy1l...\"}]}</code>	
NEL	<code>{\"success_fraction\": 0, \"report_to\": \"cf-nel\", \"max_age\": 604800}</code>	
Server	cloudflare	
CF-RAY	7ff4f7d31ee21c20-FRA	
Content-Encoding	br	
alt-svc	<code>h3=\":443\"; ma=86400</code>	