**Explain how to work on GET requests, with an example:**

What is HTTP?

The Hypertext Transfer Protocol (HTTP) is designed to enable communications between clients and servers.

HTTP works as a request-response protocol between a client and server.

Example: A client (browser) sends an HTTP request to the server; then the server returns a response to the client. The response contains status information about the request and may also contain the requested content.

**HTTP Methods:**

GET

POST

PUT

HEAD

DELETE

PATCH

OPTIONS

CONNECT

TRACE

The two most common HTTP methods are: GET and POST.

The GET Method

GET is used to request data from a specified resource.

Note that the query string (name/value pairs) is sent in the URL of a GET request:

/test/demo\_form.php?name1=value1&name2=value2

Some notes on GET requests:

GET requests can be cached

GET requests remain in the browser history

GET requests can be bookmarked

GET requests should never be used when dealing with sensitive data

GET requests have length restrictions

GET requests are only used to request data (not modify)

The POST Method

POST is used to send data to a server to create/update a resource.

The data sent to the server with POST is stored in the request body of the HTTP request:

POST /test/demo\_form.php HTTP/1.1  
Host: w3schools.com  
  
name1=value1&name2=value2

Some notes on POST requests:

POST requests are never cached

POST requests do not remain in the browser history

POST requests cannot be bookmarked

POST requests have no restrictions on data length

The PUT Method

PUT is used to send data to a server to create/update a resource.

The difference between POST and PUT is that PUT requests are idempotent. That is, calling the same PUT request multiple times will always produce the same result. In contrast, calling a POST request repeatedly have side effects of creating the same resource multiple times.

The HEAD Method

HEAD is almost identical to GET, but without the response body.

In other words, if GET /users returns a list of users, then HEAD /users will make the same request but will not return the list of users.

HEAD requests are useful for checking what a GET request will return before actually making a GET request - like before downloading a large file or response body.

The DELETE Method

The DELETE method deletes the specified resource.

The PATCH Method

The PATCH method is used to apply partial modifications to a resource.

The OPTIONS Method

The OPTIONS method describes the communication options for the target resource.

The CONNECT Method

The CONNECT method is used to start a two-way communications (a tunnel) with the requested resource.