Activity 1

Text

Description automatically generated

Output:

A picture containing table

Description automatically generated

Table

Description automatically generated

Activity 2:

In Parse-JSON.html, I had added multiple alerts to show me how the program operates. It first creates a new XHR request, then goes into the onreadystatechange property, where the readyState is at 1 – meaning that the server connection was established. It will then open the json data that we’re requesting to open, then sends the request to the server.

Onreadstatechange will then be called again, this time, readyState will go to 2 where the request is received, it will then process the request (3), then finally the request is finished and response is ready so we move onto the if statement. Within the if statement, we call the function myFunction, so it will go through that function.

This all happens this way because we are requesting for the server to process our request, which is to make sure that the request is finished, response is ready, and that the status has succeeded (status code 200).

Text

Description automatically generated

Activity 3:

Text

Description automatically generated

Output:

Graphical user interface, text, application

Description automatically generated

Activity 4:

readyState codes range from 0 – 4: 0 means request is not initialized, 1 means server established a connection, 2 means that the server got the request, 3 means that it’s processing the request, and 4 means that the request is finished and our response is ready

XHR (XMLHttpRequest) is an API to create AJAX (asynchronous) requests. It’s created by Microsoft for their Outlook email client and is used to transfer and manipulate XML/JSON/plain text data to and from a server using HTTP. This establishes a connection between client and server. Fetch API is similar to XHR but with less code – it is an async API that returns data in the form of promises. Errors such as 404 and 500 will not make the Promise reject, only if the entire request cannot be completed.