**Node.js Core Objects – HTTP Server**

* Import http from ‘http’

**http.createServer()**

* Has a ***.listen()*** method which causes the server to ‘listen’ for incoming connections.
* When we run ***http.createServer*** we pass in a custom callback function.
  + This is often referred to as ***request listener***
  + This will be triggered once the server is listening and receives a request
* How does request listener work?
  + Function expects two arguments – a request object and a response object
  + When request is made Node will invoke the provided request listener callback function – passing in request and response objects of incoming request
  + Request and response objects come with a number of properties and methods of their own
    - Can access information about the request via the request object passed in.
  + Request listener is responsible for setting the response *header* and *body*
  + Request listener signals the interaction is complete by calling the response.end() method.

const http = require('http');

let requestListener = (request, response) => {

response.writeHead(200, {'Content-Type': 'text/plain' });

response.write('Hello World!\n');

response.end();

};

const server = http.createServer(requestListener);

server.listen(3000);

* Imported http module
* Created a server variable assigned to the return value of http.createServer() method
* Invoked http.createServer() with out requestListener callback.
  + This is similar to running .on() of an EventEmitter
  + The request listener will execute whenever an HTTP request is sent to the sever on the correct port
* Within the requestListener callback we make changes to the ***response*** object so that it can send the appropriate information to the client sending the request.
  + Status code 200 means no errors were encountered
  + The header communicates that the file type is text
    - Could also be audio or compressed data for instance
* The last line starts the server with the port 3000
  + Every server on a given machine specifies a unique port so that traffic can be correctly routed.