Name: mahmoud hassan amin   Track: IOT
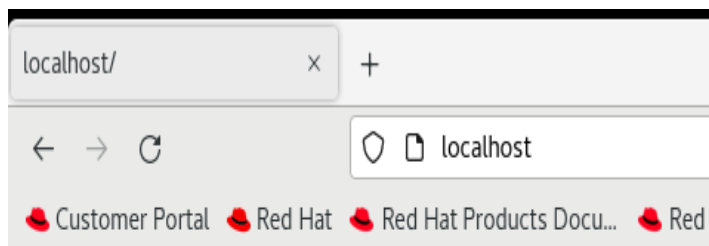
- ● Install Nginx

```
[Eng.mahmoud@192 ~]$ sudo yum install nginx
Updating Subscription Management repositories.
Last metadata expiration check: 16:53:31 ago on Fri 16 Dec 2022 09:06
PM EET.
Dependencies resolved.
================================================================
================================================
 Package                        Arch       Version
        Repository                              Size
================================================================
================================================
Installing:
 nginx                          x86_64     1:1.14.1-9.module+el8.0.0+4
af250afe    rhel-8-for-x86_64-appstream-rpms    570 k
```

- ● Change the default file (index.html) to (yourName.html)

```
root              /usr/share/nginx/html;
         index yourname.html
```


mahmoud hassan

- Make two html files, and change the configuration file to access the first file on port 81, and access the second file on port 82.

```
server {
        listen       81 default_server;
        listen       [::]:81 default_server;
        server_name  _;
        root         /usr/share/nginx/html;
        index page1.html
        # Load configuration files for the default server block.
        include /etc/nginx/default.d/*.conf;

        location / {
        }

        error_page 404 /404.html;
            location = /40x.html {
        }

        error_page 500 502 503 504 /50x.html;
            location = /50x.html {
        }
    }
```

```
server {
        listen       82 default_server;
        listen       [::]:82 default_server;
        server_name  _;
        root         /usr/share/nginx/html;
        index page2.html
        # Load configuration files for the default server block.
        include /etc/nginx/default.d/*.conf;

        location / {
        }

        error_page 404 /404.html;
            location = /40x.html {
        }

        error_page 500 502 503 504 /50x.html;
            location = /50x.html {
        }
    }
```

- Tell me the main differences between Apache & Nginx

Apache	Nginx
Apache is written in C and XML	Nginx is written in C language.
It is designed for web server.	It is designed for proxy server as well as web server
In heavy web traffic, it cannot support multiple requests.	It can support multiple client requests with limited hardware resources.
In Apache, modules are dynamically fixed that make it more complex.	In Nginx, modules cannot be loaded dynamically as there is a core software in which they are complied .
It follows Multi-Threaded approach to process client requests.	It follows Event-Driven approach to process client requests
In Apache, there is a dynamic content in web server itself.	It does not support provide dynamic content.
Apache's performance for static content is lower than that of Nginx.	Nginx's performance of static content is two times faster than that of Apache as it can simultaneously run thousands of connections and it uses less memory comparatively.
Less security provided as compared to Nginx and also the codebase is very high.	It provides better security with a smaller codebase.
File system location are passed to interpret the client requests.	It passes Uniform Resource Identifier (URI) to interpret the client requests.
Complex configuration system as compared to Nginx	It has relatively simpler configuration system.