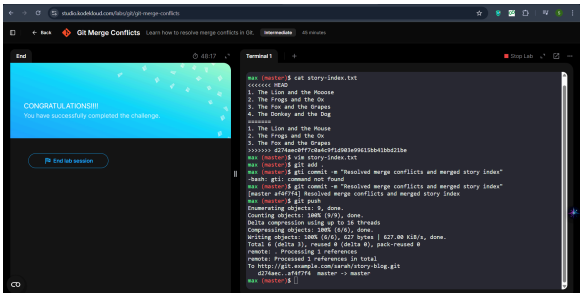
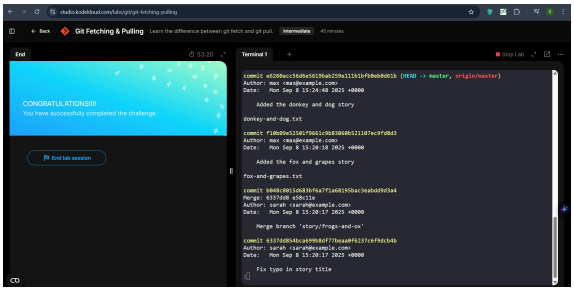
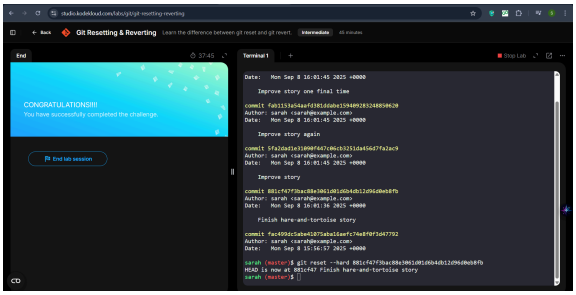
سیدمجتبی میرسلیمانی بافقی

تسک گیت

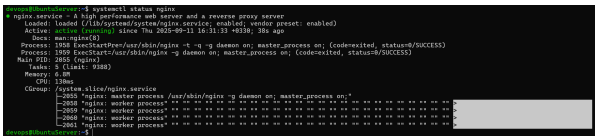


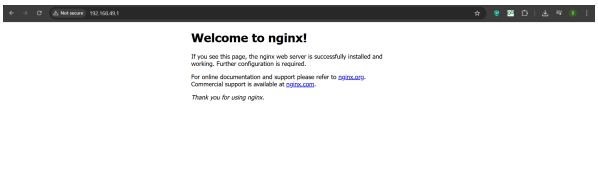


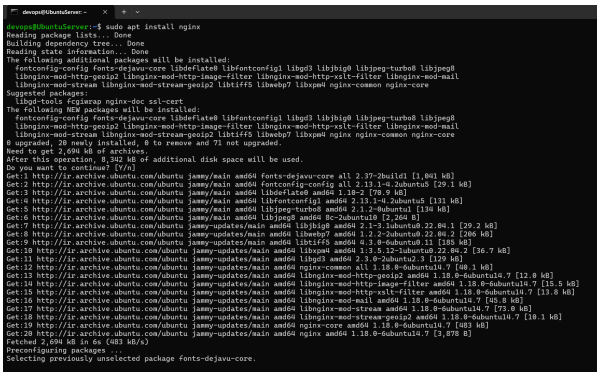


Nginx – تسک چهارم

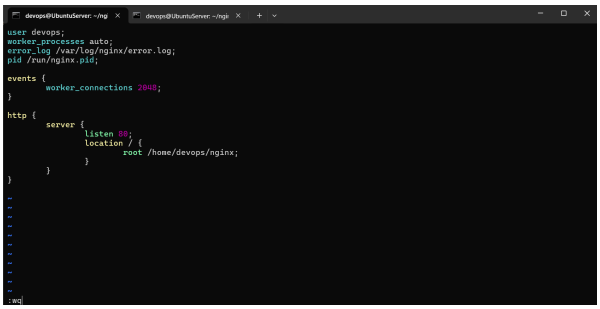
- **تمرین 1: نصب و راه‌اندازی ساده Nginx**







- **تمرین 2: سرو کردن یک سایت استاتیک با Nginx**



- **تمرین 3: پیکربندی Proxy Reverse با Nginx**

```
from flask import Flask

app = Flask(__name__)

@app.route('/')
def handle():
    return "Hello from Semir! in flask app."

if "__main__" == __name__:
    app.run(port=3000)
```

Hello from Semir! in flask app.

```
user devops;
worker_processes auto;
error_log /var/log/nginx/error.log;
pid /run/nginx.pid;

events {
        worker_connections 2048;
}

http {
        server {
                listen 80;
                location / {
                        proxy_pass http://127.0.0.1:3000;
                }
        }
^C(venv) devops@UbuntuServer:~/nginx$ systemctl restart nginx
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===
Authentication is required to restart 'nginx.service'.
Multiple identities can be used for authentication:
 1.  devops
 2.  admin1
Choose identity to authenticate as (1-2): 1
Password:
==== AUTHENTICATION COMPLETE ===
(venv) devops@UbuntuServer:~/nginx$
```

```
(venv) devops@UbuntuServer:~/nginx$ python app.py
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:3000
Press CTRL+C to quit
127.0.0.1 - - [12/Sep/2025 22:48:14] "GET / HTTP/1.0" 200 -
```

- **تمرین 4: پیکربندی Load Balancing با Nginx**

(venv) devops@UbuntuServer:~/nginx$ python app.py
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:3000
Press CTRL+C to quit
127.0.0.1 - - [12/Sep/2025 22:48:14] "GET / HTTP/1.0" 200 -

```
user devops;
worker_processes auto;
error_log /var/log/nginx/error.log;
pid /run/nginx.pid;

events {
        worker_connections 2048;
}

http {
        upstream loadbalance {
                server 127.0.0.1:3000;
                server 127.0.0.1:3001;
        }
        server {
                listen 80;
                location / {
                        proxy_pass http://loadbalance;
                }
        }

}
```

```
devops@UbuntuServer:~$ curl http://localhost:80
Hello from Semir! From port 3001.devops@UbuntuServer:~$ curl http://localhost:80
Hello from Semir! From port 3000.devops@UbuntuServer:~$ curl http://localhost:80
Hello from Semir! From port 3001.devops@UbuntuServer:~$ curl http://localhost:80
Hello from Semir! From port 3000.devops@UbuntuServer:~$ curl http://localhost:80
Hello from Semir! From port 3001.devops@UbuntuServer:~$
```

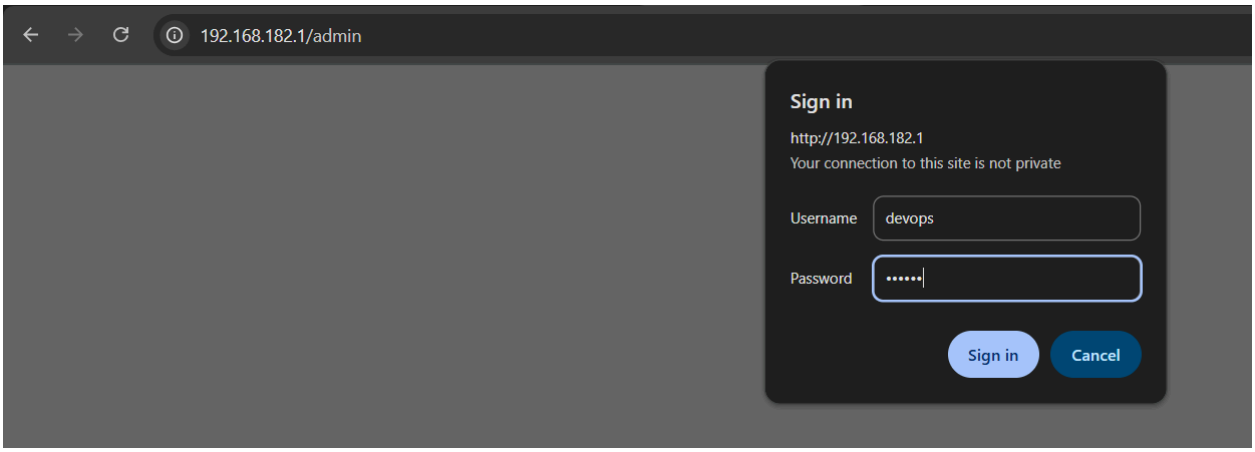
- **تمرین :6 پیاده سازی Authentication در Nginx با استفاده از htpasswd**

```
user devops;
worker_processes auto;
pid /run/nginx.pid;

events {
        worker_connections 2048;
}

http {
        upstream load_balance {
                server 127.0.0.1:3000 weight=1;
                server 127.0.0.1:3001 weight=1;
        }
        server {
                listen 80;
                location / {
                        proxy_pass http://load_balance;
                }
                location /admin {
                        root /home/devops/nginx/admin;
                        auth_basic "Admins' area";
                        auth_basic_user_file /home/devops/nginx/.htpasswd;
                }
        }
}
```

```
devops@UbuntuServer:~/nginx$ sudo htpasswd -c ./.htpasswd devops
New password:
Re-type new password:
Adding password for user devops
devops@UbuntuServer:~/nginx$ sudo cat ./.htpasswd
devops:$apr1$C89Cz4lW$0Cvobex80qCituPyPB67l/
devops@UbuntuServer:~/nginx$ man htpasswd
devops@UbuntuServer:~/nginx$ sudo htpasswd ./.htpasswd admin1
New password:
Re-type new password:
Adding password for user admin1
devops@UbuntuServer:~/nginx$ cat ./.htpasswd
devops:$apr1$C89Cz4lW$0Cvobex80qCituPyPB67l/
admin1:$apr1$RXdasUue$9cXqWvJpFTEL34BEtUUvF.
devops@UbuntuServer:~/nginx$
```



بخش امتیازی

- **تمرین :1 پیاده سازی کشینگ)Caching(در Nginx**

```
user devops;
worker_processes auto;
pid /run/nginx.pid;

events {
        worker_connections 2048;
}

http {
        upstream load_balance {
                server 127.0.0.1:3000 weight=1;
                server 127.0.0.1:3001 weight=1;
        }
        server {
                listen 80;
                location / {
                        proxy_pass http://load_balance;
                }
                location /admin {
                        root /home/devops/nginx/admin;
                        auth_basic "Admins' area";
                        auth_basic_user_file /home/devops/nginx/.htpasswd;
                }
                location /static {
                        root /home/devops/nginx;
                        expires 30d;
                        add_header Cache-Control "public, no-transform";
                }
        }
```