Project-3

**Integrate Grafana with Linux Server for highcpu utilization and create a graph in Grafana.**



### Install Grafana:

**->Install Grafana**: Follow the official Grafana installation guide to install Grafana on your server.



### Configure Data Source:

**->Add Data Source**: Once Grafana is installed and running, you need to add a data source. Typically, you would use Prometheus or another monitoring system that Grafana supports.

* + If using **Prometheus**: Install Prometheus on your Linux server (if not already installed) and configure it to scrape metrics, including CPU utilization.
  + Edit the Prometheus configuration file (prometheus.yml) to scrape metrics from your Linux server.
  + Restart Prometheus after editing the configuration.

**->Add Prometheus Data Source to Grafana**:

* + Log in to Grafana, go to Configuration > Data Sources > Add data source.
  + Choose Prometheus and configure it with the URL of your Prometheus server (usually http://localhost:9090 if on the same server).

### Create a CPU Utilization Dashboard:

**->Create a New Dashboard**:

* + Go to the Grafana home page, click on the "+" icon on the left sidebar, and select "Dashboard".

**->Add a Graph Panel**:

* + Click on "Add new panel" (represented by a "+" sign in the top right corner of the dashboard view).
  + Choose "Graph" as the panel type.

**->Configure the Graph**:

* + Under the panel’s "Query" tab, select Prometheus as the data source.
  + Write a query to fetch CPU utilization metrics. Example query to get average CPU usage over time:

**->Customize and Save**:

* + Customize the graph appearance (e.g., axis labels, legend) and apply any necessary transformations or aggregations.
  + Click "Save" to save the dashboard and panel configuration.

### View and Monitor

**->View the Dashboard**:

Navigate to your newly created dashboard to view real-time CPU utilization data from your Linux server.