**Grafana(visualization tool)**

Click on Program files-> GrafanaLabs-> grafana -> bin ->open cmd in this path & type

* grafana-server

Open the Grafana in browser

* localhost:8080

**Roles:**

* No basic role
* Viewer
* Editor
* Admin

**Dashboard:**

Click on **New** -> select **New folder**-> Give **folder name**(Grafana\_Demo)-> click on **Create**

**Connections:**

On grafana home page- > Click on **connection** -> Data sources -> Add **new data source** -> search csv(if not found, go to plugins & install it) ->click on **csv** ->**give Name**, **Storage location(Local)**->**Path of csv file** -> Click on **Save&test**

If it shows error for local mode disabled-> go to view documentation -> click on **configuration** -> Under **Allow local mode** -> copy the code & paste it inside the GrafanaLabs-> grafana -> conf -> custom file ->under **Data source** add the copied code(close the Grafana-server & open it again)

Click on **explore data** -> click on **Add to dashboard** ->Select **New dashboard** -> click on **open in new tab** -> Click on **Add** -> Select **Visualization** -> From the drop down select the **data source** (created by you for eg. num sample) -> Give **Field** (City, Count) & **type** (String,Number) -> Under **Time series** -> Select **Bar chart** -> **Chart will come** -> Under **Panel options** -> customize according to ur need -> click on **Apply** -> Click on **Save** -> **Save dashboard will open** -> **Give title ->** under **folder** select the particular folder -> Click on **Save**

Inside **Edit panel** **->** click on **transform data** **->** click on **Convert field type** **->** add fields & type(it will show existing data, just select field from that) **->** click on **Save**

* **Library panel ->** visualizations that are shared with other dashboards

**Alerts:**

**Alert Types:**

* Grafana based alert
* Data source based alert

Click on **Alerting** -> click on **Alert rules**(specially click on **manage alerts**) -> click on **New Alert rule** -> enter alert **rule name** (eg. Over population) -> **Under Define query and alert condition** (select datasource(eg.num sample.csv), enter field, Expressions give Threshold value) -> **Under Set evaluation folder**(Give folder, evaluation group(give 10s),Pending period) -> **Under Add annotations(this is optional)** -> **Under Labels and notifications**(**this is optional**) -> click on **Save rule&exit**

Click on **Contact points** -> Under **Create contact points** -> give **name** and **email address** -> click on **Save contact point**