

1-what is different http status code and explain meaning of each of them ?

- Informational responses (100 - 199)
- Successful responses (200 - 299)
- Redirection messages (300 - 399)
- Client error responses (400 - 499)
- Server error responses (500 - 599)

2-What database is used by Prometheus?

- Time Series Database

3-what is the difference between different metrics types (counter , gauge , histogram)

Counter: how many times the event happened

Gauge: the current value of the event

Histogram: how long the event happened

4-install prometheus on your localhost or on server in any cloud provider

```
ubuntu@ip-172-31-42-109: ~  
● prometheus.service - Prometheus  
   Loaded: loaded (/etc/systemd/system/prometheus.service; enabled; ven>  
   Active: active (running) since Sat 2023-02-18 00:46:21 UTC; 37min ago  
 Main PID: 29532 (prometheus)  
    Tasks: 8 (limit: 1143)  
   Memory: 47.8M  
      CPU: 3.312s  
   CGroup: /system.slice/prometheus.service  
           └─29532 /usr/local/bin/prometheus --config.file /etc/prometh>  
  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 00:46:24 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T00:46:2>  
Feb 18 01:00:10 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T01:00:1>  
Feb 18 01:00:10 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T01:00:1>  
Feb 18 01:00:10 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T01:00:1>  
Feb 18 01:00:10 ip-172-31-42-109 prometheus[29532]: ts=2023-02-18T01:00:1>  
lines 1-20/20 (END)
```

Prometheus Time Series

Not secure | 3.91.52.214:9090/graph?g0.expr=&g0.tab=1&g0.stacked=0&g0.show_exemplars=0&g0.range_input=1h

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Prometheus Alerts Graph Status Help

☐ Use local time ☐ Enable query history ☒ Enable autocomplete ☒ Enable highlighting ☒ Enable linter

Expression (press Shift+Enter for newlines) Execute

Table Graph

Evaluation time

No data queried yet

Remove Panel

Add Panel

5-add any new target to prometheus.yaml file and apply any query on it using promql language

Prometheus Time Series

Not secure | 3.91.52.214:9090/graph?g0.expr=container_cpu_load_average_10s{image='nginx'}&g0.tab=1&g0.stacked=0&g0.show_exemplars=0&g0.range_input=1h

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Prometheus Alerts Graph Status Help

☐ Use local time ☐ Enable query history ☒ Enable autocomplete ☒ Enable highlighting ☒ Enable linter

container_cpu_load_average_10s{image='nginx'} Execute

Table Graph

Evaluation time

Load time: 220ms Resolution: 14s Result series: 1

container_cpu_load_average_10s{container_label_maintainer="NGINX Docker Maintainers <docker-maint@nginx.com>", id="/system.slice/docker-6a75a7d83a8023276959aa0df3b3deaff2acfe16f02c31f76a052646256dcaa9.scope", image="nginx", instance="localhost:8080", job="c-advisor", name="focused_shannon"} 0

Remove Panel

Add Panel