

```
qus1 :
{
  "students": [
    {
      "id": 101,
      "name": "Sarah Johnson",
      "courses": ["CS101", "MATH200", "ENG150"],
      "gpa": 3.85,
      "active": true,
      "graduation_date": null
    },
    {
      "id": 102,
      "name": "Alex Chen",
      "courses": ["CS101", "CS102", "STAT101"],
      "gpa": 3.92,
      "active": true,
      "advisor": null,
      "notes": "Excellent student with strong
analytical skills"
    },
    {
      "id": 103,
      "name": "Maria Rodriguez",
      "courses": [],
      "gpa": 3.67,
      "active": false,
      "special_programs": ["honors", "research"]
    }
  ],
  "last_updated": "2024-09-15T10:30:00Z",
  "total_students": 3
}
```

qus2:

```
[server]
host = "0.0.0.0"
port = 8080
debug = false
max_connections = 1000
[database]
url = "postgresql://localhost:5432/myapp"
pool_size = 20
timeout = 30
[logging]
level = "info"
file = "/var/log/myapp.log"
max_size = "100MB"
rotate = true
[[feature_flags]]
name = "new_ui"
enabled = true
rollout_percentage = 25
[[feature_flags]]
name = "analytics"
enabled = false
rollout_percentage = 0
[cache]
redis_url = "redis://localhost:6379/0"
ttl = 3600
```

a. How many feature flags are currently defined, and which ones are active?

ans : There are two feature flags defined: "new_ui" and "analytics". The "new_ui" feature flag is active.

b. What happens when the log file reaches 100MB?

ans : When the log file reaches 100MB, it will be rotated, meaning a new log file will be created and the old one will be archived.

c. If you wanted to make the server accessible only from localhost, what should you change?

ans : To make the server accessible only from localhost, we should change the host value in the server from '0.0.0.0' to "127.0.0.1" or "localhost".

d. Calculate the total number of seconds that cached items will remain valid.

ans : Cached items will remain valid for 3600 seconds.

e. Explain the difference between the [feature_flags] and [[feature_flags]] syntax.

ans : The [feature_flags] syntax is used to define a single table, while the [[feature_flags]] syntax is used to define an array of tables, allowing for multiple entries with the same structure.

Que3:

Repo link :

https://github.com/VaibhavHelambe/mlops2025w_142502015/tree/main/assignment/Assignment3

Result link :

https://github.com/VaibhavHelambe/mlops2025w_142502015/tree/main/assignment/Assignment3/Result