Readiness probes and liveness probes in Kubernetes are essential components for monitoring and managing the health of containers within a pod. They help ensure that only healthy containers are serving traffic and automatically restart unhealthy ones.

**1. Readiness Probes:**

* Readiness probes are used to determine if a container is ready to serve traffic.
* These probes check the health of the application running inside the container.
* If the readiness probe fails, Kubernetes will stop routing traffic to the container.
* This helps prevent users from accessing unhealthy or incomplete services.

**2. Liveness Probes:**

* Liveness probes, on the other hand, are used to determine if a container is still running and functioning correctly.
* They help detect when a container has encountered a critical issue and needs to be restarted.
* If the liveness probe fails, Kubernetes will terminate the container and create a new one from the latest image.

Note:

* Both types of probes can be configured using various methods, including HTTP, TCP, and exec commands.
* They can be used to check specific endpoints, ports, or perform custom health checks within the container.
* Proper configuration and monitoring of readiness and liveness probes are crucial for maintaining the reliability and availability of applications deployed on Kubernetes.