Services :-

An abstract way to expose an application running on a set of pods as a network service. With K8S you don't need to modify your application to use an unfamiliar service discovery mechanism. K8S gives pods their own IP addresses and a single DNS name for a set of pods, and can load-balance across them.

① clusterIP Service -

clusterIP Exposes the service on a cluster-internal IP. choosing this value makes the services only reachable from within the cluster. This is the default service type.

② Headless service -

A headless service is a service with a service IP but instead of load-balancing it will return the IPs of our associated pods. This allows to interact directly

with the pods instead of a proxy.

③ NodePort Service -

A NodePort is an open port on every node of your cluster. K8S transparently routes incomming traffic on the NodePort to your service, even if your application is running on a different node.

④ External Name service -

ExternalName services are similar to other K8S services; however instead of being accessed via a clusterIP address, it returns a CName record with a valu that is defined in the externalName; parameter when creating the service.

⑤ Load Balancer Service -

For clusters running onpublic cloud providers like AWS or Azure, creating a load balancer service provide an equivalent to a cluster IP service, extending it to an external load balancer that is specific to the cloud provider.