Exam Instrutions:

1. You will hae 8 VMs in the exam

* Loadbalaner.domain3.example.m
* Registry.domain3.example.cm
* Workbench.domain3.example.com (where we will do our work)
* Master0.domain3.example.com
* Master1.domain3.example.com
* Master2.domain3.example.com
* Worker0.domain3.example.com
* Worker1.domain3.example.com

1. 3 Hours Exam
2. Cluster is already configured an all require packages are installed. In case you need any package, you can install with preconfigured repositories.
3. Docs are availale in html & PDF format
4. Cluster We Console and API url will be given in the exam:

<https://console.domain3.example.com:6443>

<https://api.domain3.example.com:6443>

1. Kubeadmin user password is stored in /root/kubeadmin-passwd on workbench VM
2. One common password will be gien in the exam, we can use same password to access workbench VM as root

Q1. Manage Identity Providers: (secret name and identity provider name will be given in the exam).

* Create user bob with password indionce
* Create user qwerty with password catalog
* Create user john with password john123
* Create user harry with passwory harry123
* Create user natasha with password natasha123
* Create user susan with password susan123
* Identity provider name should be users.

Q2. Manager Cluster Project and Permissions:

* Create project with named apollo, test,demo
* Bob juser should have cluster administrator right
* Joh user can create new project
* Qwerty user can not create projects
* Natasha user can only view the resources of apollow and test project
* Kubeadmin user should not exist (remove kubeadmin user)

Q3. Managing Groups:

* Create a group with named site-users and guest-users
* Add qwerty user in guest-users group
* Add harry and susan in site-users
* Give edit permission to sites-users group on test project
* Give edit permission to sites-users groups on test project
* Give view permission to guest-user groups on demo project

Q4. Create resources quota for project rocky:

* Pods = 3
* Cpu = 2
* Services = 6
* Memory =1Gi
* Secrets = 6

Q5. Create LimitRagne for Project Rocky:

* Set the pod memory limit between 5Mi and 300Mi
* Set the container memory limit between 5Mi and 300 Mi
* Set the pod cpu limit between 5M and 300M
* Set the container cpu limit between 5m and 400m
* Set the container default limit for memory and cpu to 100Mi and 100m respectively.

Q6. Deploy application in the project project1:

* There is one pod already running and,
* Application should produce output

Q7. Scale Application Manually:

* Scale the signle-pod replicas to 6 under the project world and make sure all pods should run successfully.

Q8. Autoscale of Pods in scalling project:

* Minimum replicas=2, maximum replicas=9 and cpu percentage=60%
* Default request for container memory should 100Mi and CPU 50m

Q9. Create secret with named ex280-secure in secure project

* The key name should be myuser
* The value of key should be asdf234234=

Q10. Use Secret in secure project

* There is one pod already exists.
* It should use ex280-secure secret
* Application should produce output

Q11. Create Secure Route in quart project

* One application is already running named with hello based on http
* It should run on https with self-signed certificate
* It should use ‘/CN=quart.apps.domain3.example.com’
* It should run on http with following url: <https://quart.apps.domain3.example.com>
* Application should produce output.

Q12. Create Service Account(user) in project1:

* Service Account(user) should be project1-sa
* Service Account should be associated with anyuid SCC

Q13. Deploy application in the project project2:

* There is one pod already running and,
* Application should produce output

Q14. Deploy application in the project project3:

* There is one pod already running and
* Application should produce output

Q15. Deploy application in the project project4:

* There is one pod already running and
* Application should produce output

Q2: