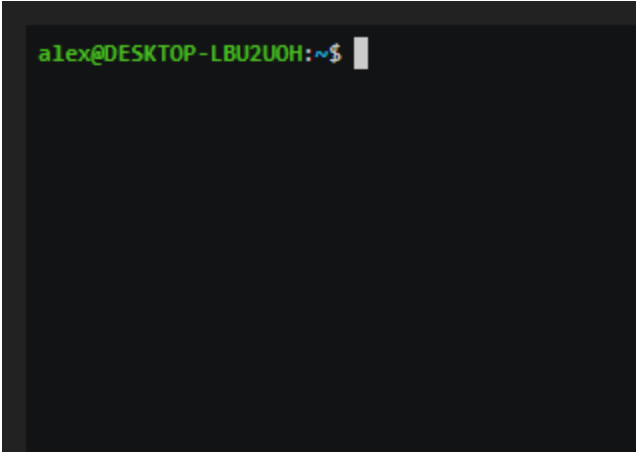


# Kubernetes Basics Homework

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## Task 1: "Network Setup With runC Containers"

A terminal window with a dark background. The prompt 'alex@DESKTOP-LBU2U0H:~\$' is displayed in green text at the top left, followed by a white cursor.

```
alex@DESKTOP-LBU2U0H:~$
```

<https://asciinema.org/a/417092>

## Task 2: "Build a docker image & push it to the Container Registry"

Dockerfile:


```
FROM alpine
```

```
CMD while true; do echo -e "HTTP/1.1 200 OK\n\n :)" | nc -l -p 80; done
```

```
EXPOSE 80
```

Let`s build & push the image to the registry:

The screenshot shows the Google Cloud Platform interface for Container Registry. The top navigation bar is blue with the Google Cloud Platform logo and the text 'GLBaseCamp'. Below this, the 'Container Registry' section is active, showing a sidebar with 'Images' and 'Settings'. The main content area displays the 'bash\_serv' image, with the path 'gcr.io / second-terra-315309 / bash\_serv'. A search bar is present, and a table lists the image details:

<input type="checkbox"/>	Name	Tags
<input type="checkbox"/>	 9d08dcd294b9	latest

## Task 3: "Create a Kubernetes cluster & deploy the image there"

Let's create a Kubernetes cluster:

The screenshot shows the Google Cloud Platform console interface. The left sidebar contains navigation links for Kubernetes Engine, Clusters, Workloads, Services & Ingress, Applications, Configuration, Storage, Object Browser, and Migrate to containers. The main content area displays the details for a cluster named 'cluster-1'. A warning message indicates that the cluster has one or more unschedulable pods, with a link to 'Autoscaling documentation'. Below this, there are tabs for DETAILS, NODES, STORAGE, and LOGS. The 'DETAILS' tab is active, showing a table of cluster basics.

Cluster basics		
Name	cluster-1	🔒
Location type	Zonal	🔒
Control plane zone	us-central1-c	🔒
Default node zones	us-central1-c	✏️
Release channel	Regular channel	✏️ UPGRADE AVAILABLE
Version	1.19.9-gke.1400	
Total size	1	ℹ️
Endpoint	35.192.187.210	🔒
	<a href="#">Show cluster certificate</a>	

And deploy the image from the registry:

The screenshot shows the Google Cloud Platform console interface for a Kubernetes cluster. It displays the 'Active revisions' section, which shows a single revision with a status of 'OK'. Below this, the 'Managed pods' section shows three pods in a 'Running' state. At the bottom, the 'Exposing services' section shows a single service named 'bashserv-service' of type 'Load balancer' with endpoints at '23.236.62.0:80'.

### Active revisions

Revision ↓	Name	Status	Summary
1	bashserv-65bbcd85b4	✅ OK	bash-serv-sha256-1: gcr.io/second-terra-315309/bash_serv@sha256:9d08dcd294b9eb385f071b6

### Managed pods

Revision	Name	Status	Restarts	Created on ↑
1	bashserv-65bbcd85b4-6hhth	✅ Running	0	May 30, 2021, 2:58:45 PM
1	bashserv-65bbcd85b4-mxrhv	✅ Running	0	May 30, 2021, 2:58:45 PM
1	bashserv-65bbcd85b4-x7tfl	✅ Running	0	May 30, 2021, 2:58:45 PM

### Exposing services ?

Name ↑	Type	Endpoints
bashserv-service	Load balancer	23.236.62.0:80 ↗

Let's check if the deployment work correctly:

