# Steps to create minikube cluster.

## Prerequisites

* 2 CPUs or more
* 2GB of free memory
* 20GB of free disk space
* Container or virtual machine manager, such as: Docker, QEMU, Hyperkit, Hyper-V, KVM, Parallels, Podman, VirtualBox, or VMware Fusion/Workstation

For this task will be using docker as the virtual machine manager.

To install docker you can follow <https://docs.docker.com/get-docker/> link for instructions.

## Minikube installation and configuration

1. Download the minikube latest installer from <https://minikube.sigs.k8s.io/docs/start/> and install minikube.
2. Once Installation is completed open a command prompt and run below command.

*minikube start*

A screenshot of a computer program

Description automatically generated with low confidence

1. Once the minikube creation is complete you will see success message as below.

A computer screen with white text

Description automatically generated with low confidence

1. To check the pod status can try with the below command.  
     
   *kubectl get po -A*

Output should be as follows.  
A screen shot of a computer

Description automatically generated with low confidence

## Explanations For minikube deployment

* Yaml files in <https://github.com/titan213/Tests/tree/main/Task3/Deployment> creates a namespace named testkube and deploys two services (service-a and service-b) as separate Deployments and exposes them internally using Services.
* The Services allow communication between different components within the Kubernetes cluster.
* The containers within the Deployments listen on port 5000, and the Services map incoming traffic on port 80 to the containers' target ports.

### Code Base

* <https://github.com/titan213/Tests/tree/main/Task3>