# Environment Preparation

Install the following tools and configure autocompletion for them:

* configure autocompletion for your shell
* install Docker
* install kubectl
* install Minikube
* install AWS CLI

## Bash Autocomplete Prerequisites

bash-completion package should be installed first:

$ sudo apt-get install bash-completion  
$ source /etc/bash-completion

The last command should be in your ~/.bashrc, ~/.profile or ~/.bash\_profile.

## Docker

Install and check Docker:

$ sudo apt-get install docker.io  
$ sudo systemctl enable docker  
$ sudo systemctl status docker  
$ sudo systemctl start docker  
$ sudo docker version  
Client: Docker Engine - Community  
 Cloud integration: 1.0.14  
 Version: 20.10.6  
 API version: 1.41  
 Go version: go1.13.15  
 Git commit: 370c289  
 Built: Fri Apr 9 22:46:45 2021  
 OS/Arch: linux/amd64  
 Context: default  
 Experimental: true  
  
Server: Docker Engine - Community  
 Engine:  
 Version: 20.10.6  
 API version: 1.41 (minimum version 1.12)  
 Go version: go1.13.15  
 Git commit: 8728dd2  
 Built: Fri Apr 9 22:44:56 2021  
 OS/Arch: linux/amd64  
 Experimental: false  
 containerd:  
 Version: 1.4.4  
 GitCommit: 05f951a3781f4f2c1911b05e61c160e9c30eaa8e  
 runc:  
 Version: 1.0.0-rc93  
 GitCommit: 12644e614e25b05da6fd08a38ffa0cfe1903fdec  
 docker-init:  
 Version: 0.19.0  
 GitCommit: de40ad0

Set up autocompletion:

$ source <(curl -s https://raw.githubusercontent.com/docker/cli/master/contrib/completion/bash/docker)

Check your completion:

$ docker im<TAB>  
image images import

## kubectl

An example of binary installation:

$ curl -LO https://storage.googleapis.com/kubernetes-release/release/$(curl -s https://storage.googleapis.com/kubernetes-release/release/stable.txt)/bin/linux/amd64/kubectl  
$ sudo install kubectl /usr/local/bin/kubectl  
$ kubectl version  
$ rm kubectl

Set up autocompletion:

$ source <(kubectl completion bash)  
$ alias k=kubectl  
$ complete -F \_\_start\_kubectl k

Set an editor for kubectl:

$ export KUBE\_EDITOR='nano'

## minikube

An example of binary installation for Linux:

$ curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64  
$ sudo install minikube-linux-amd64 /usr/local/bin/minikube  
$ rm minikube-linux-amd64  
$ minikube version  
minikube version: v1.20.0  
commit: c61663e942ec43b20e8e70839dcca52e44cd85ae

Set up autocompletion:

source <(minikube completion bash)

## AWS CLI

Install AWS CLI according to [manual](https://docs.aws.amazon.com/cli/latest/userguide/install-cliv2.html).

Check the installation:

$ curl "https://awscli.amazonaws.com/awscli-exe-linux-x86\_64.zip" -o "awscliv2.zip"  
$ unzip awscliv2.zip  
$ sudo ./aws/install  
$ aws --version  
aws-cli/2.2.10 Python/3.8.8 Linux/5.4.72-microsoft-standard-WSL2 exe/x86\_64.ubuntu.20 prompt/off

Set up autocompletion:

$ complete -C '/usr/local/bin/aws\_completer' aws