

Module 5: Assignment -1

Tasks To Be Performed:

1. Install a Docker using VM
2. Pull hshar/webapp (<https://hub.docker.com/r/hshar/webapp>) repository
3. Create a new file in this repositior

Solution:

- 1. Install a Docker using VM**

[Home](#) > [Resource groups](#) >

Create a resource group

[Basics](#) [Tags](#) [Review + create](#)

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Project details

Subscription * ⓘ

Free Trial



Resource group * ⓘ

Module5



Resource details

Region * ⓘ

(Asia Pacific) Central India

[Review + create](#)[< Previous](#)[Next : Tags >](#)

Microsoft Azure

Upgrade

Search resources, services, and docs (G+)

Home > Virtual machines >

Create a virtual machine

Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Basics

Disks

Networking

Management

Monitoring

Advanced

Tags

Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

This subscription may not be eligible to deploy VMs of certain sizes in certain regions.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *

Free Trial

Resource group *

Module5

Create new

Instance details

Virtual machine name *

Module2Vm

Region *

(Asia Pacific) Central India

Availability options

No infrastructure redundancy required

< Previous

Next : Disks >

Review + create

Microsoft Azure

Upgrade

Search resources, services, and docs (G+/)

Home > Virtual machines >

Create a virtual machine ...

⚠ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

🔗 Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Administrator account

Authentication type ⓘ

SSH public key

Password

Username * ⓘ

Jungkook

Password *

.....

Confirm password *

.....

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ⓘ

None

Allow selected ports

Select inbound ports *

HTTP (80), SSH (22)

ℹ All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.

< Previous

Next : Disks >

Review + create

Home >

Virtual machines ...

Default Directory (adhrin@gerardo150@gmail.com@microsoft.com)

+ Create

Switch to classic

Reservations

Manage view

Refresh

Export to CSV

Open query

Assign tags

Start

Restart

Stop

Delete

Services

Maintenance

Filter for any field... Subscription equals all Type equals all Resource group equals all Location equals all Add filter

Showing 1 to 1 of 1 records.

No grouping

List view

Name ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system ↑↓	Size ↑↓	Public IP address ↑↓	Disks ↑↓	
Module2Vm	Free Trial	Module5	Central India	Running	Linux	Standard_B1s	4.188.245.61	1	...

```
ca Jungkook@Module2Vm: ~
```

```
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/pro
```

```
System information as of Thu Sep 5 17:12:08 UTC 2024
```

```
System load: 0.05          Processes:            107
Usage of /:  5.2% of 28.89GB Users logged in:          0
Memory usage: 34%          IPv4 address for eth0: 10.0.0.4
Swap usage:  0%
```

```
Expanded Security Maintenance for Applications is not enabled.
```

```
0 updates can be applied immediately.
```

```
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
```

```
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
```

```
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
```

```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

```
Jungkook@Module2Vm:~$
```

```
Jungkook@Module2Vm:~$ sudo apt-get update
```

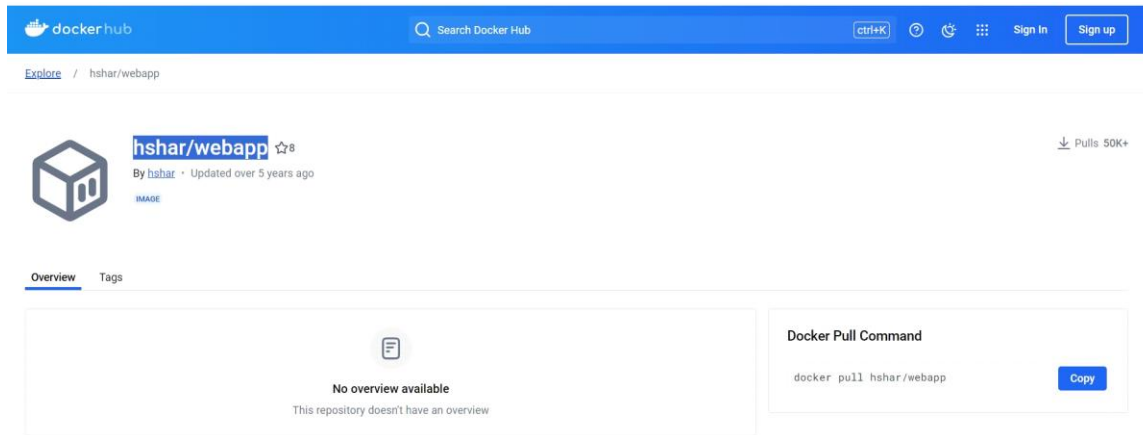
```
Hit:1 http://archive.ubuntu.com/ubuntu jammy
```

```
Jungkook@Module2Vm:~$ sudo apt-get install docker.io
Reading package lists... Done
```

2. Pull hshar/webapp (<https://hub.docker.com/r/hshar/webapp>) repository

(<https://hub.docker.com/r/hshar/webapp>) |

```
.. ..
```



```
no VM guests are running outdated hypervisor (qemu) binaries on this host.
Jungkook@Module2Vm:~$ sudo docker pull hshar/webapp
Using default tag: latest
latest: Pulling from hshar/webapp
a48c500ed24e: Pull complete
1e1de00ff7e1: Pull complete
0330ca45a200: Pull complete
471db38bcfbf: Pull complete
0b4aba487617: Pull complete
c2e32ec79cfd: Pull complete
a18d6ba75273: Pull complete
4c2cc0ff3ce8: Pull complete
Digest: sha256:3c7cbcab1a26c01410dcc9cbc57252b50d9ed2f31a2dc24e3f066c61b88e839b
Status: Downloaded newer image for hshar/webapp:latest
docker.io/hshar/webapp:latest
Jungkook@Module2Vm:~$
```

```
Jungkook@Module2Vm:~$ sudo docker images
REPOSITORY      TAG       IMAGE ID       CREATED        SIZE
hshar/webapp    latest   0cbc1f535ed8   5 years ago    303MB
Jungkook@Module2Vm:~$
```

```
Jungkook@Module2Vm:~$ sudo docker images
REPOSITORY      TAG       IMAGE ID       CREATED        SIZE
hshar/webapp    latest   0cbc1f535ed8   5 years ago    303MB
Jungkook@Module2Vm:~$ sudo docker run -itd --name myimage hshar/webapp
57c381bb1103d07bca354244a81ef18209346505863a1c3bcfa1027dcf3ca68b
Jungkook@Module2Vm:~$ sudo docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
57c381bb1103   hshar/webapp  "/bin/sh -c 'apachec..."  20 seconds ago Up 19 seconds  80/tcp        myimage
Jungkook@Module2Vm:~$
```

3. Create a new file in this repository

root@57c381bb1103: /var/www/html

```
Jungkook@Module2Vm:~$ sudo docker exec -it myimage bash
root@57c381bb1103:/# cd /var/www/html
root@57c381bb1103:/var/www/html# ls
index.php
root@57c381bb1103:/var/www/html# rm index.php
root@57c381bb1103:/var/www/html# ls
root@57c381bb1103:/var/www/html# nano index.html
root@57c381bb1103:/var/www/html# ls
index.html
root@57c381bb1103:/var/www/html# cat index.html
<h2>THIS IS MY ASSIGNMENT 1 OF MODULE 5<h2>
root@57c381bb1103:/var/www/html#
```

root@57c381bb1103: /var/www/html

```
Jungkook@Module2Vm:~$ sudo docker exec -it myimage bash
root@57c381bb1103:/# cd /var/www/html
root@57c381bb1103:/var/www/html# ls
index.php
root@57c381bb1103:/var/www/html# rm index.php
root@57c381bb1103:/var/www/html# ls
root@57c381bb1103:/var/www/html# nano index.html
root@57c381bb1103:/var/www/html# ls
index.html
root@57c381bb1103:/var/www/html# cat index.html
<h2>THIS IS MY ASSIGNMENT 1 OF MODULE 5<h2>
root@57c381bb1103:/var/www/html#
```

Commands :

- 1 sudo apt-get update
- 2 clear
- 3 sudo apt-get install docker.io
- 4 sudo docker pull hshar/webapp
- 5 sudo docker images
- 6 sudo docker run -itd --name myimage hshar/webapp
- 7 sudo docker ps

8 clear

9 sudo docker exec -it myimage bash

10 history