Module 5: Assignment - 1

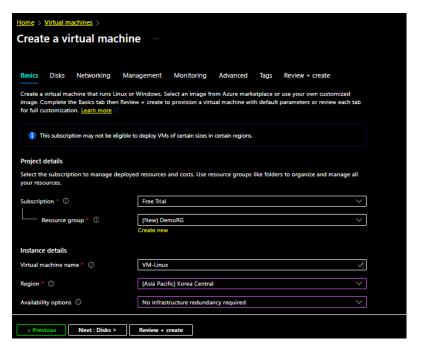
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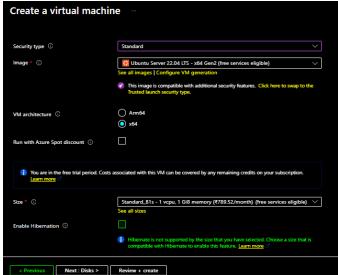


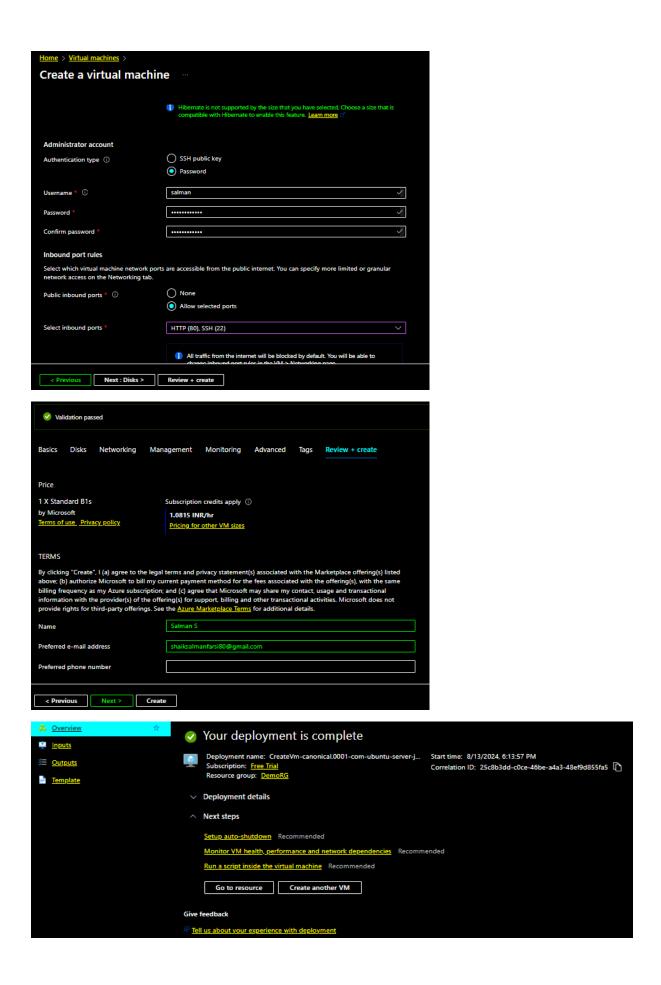
Tasks To Be Performed:

- 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 repository

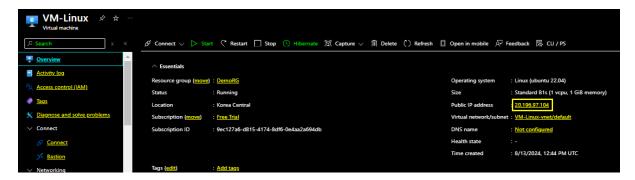
Launch Ubuntu Virtual Machine



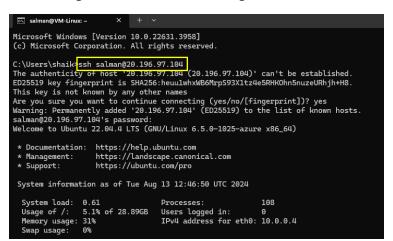




Copy the Public IP



Connecting to linux machine on using cmd



```
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 list of available updates is more than a week old.

To check for new updates run: sudo apt update

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.

salman@VM-Linux:~$
```

Update it



Installing docker on ubuntu

Pulling the image from the docker given image in the Assignment

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

And Run in default port 80 and giving image name myazureimage

```
salman@VM-Linux: ~
salman@VM-Linux:~$ sudo docker run -itd --name myazureimage hshar/webapp
08e2894e7f37deec069a83703808aef6d1156229f2d574340f8f872b017e2946
salman@VM-Linux:~$ sudo docker ps
CONTAINER ID IMAGE
                              COMMAND
                                                       CREATED
                                                                        STATUS
                                                                                        PORTS
                                                                                                   NAMES
08e2894e7f37 hshar/webapp
                              "/bin/sh -c 'apachec..."
                                                       31 seconds ago
                                                                        Up 30 seconds
                                                                                        80/tcp
                                                                                                   myazureimage
salman@VM-Linux:~$
```

Now going inside the container image and removing default index.php and creating new file with name as index.html

```
root@08e2894e7f37:/var/ww × + ×

salman@VM-Linux:~$ sudo docker exec -it myazureimage bash
root@08e2894e7f37:/# cd /var/www/html
root@08e2894e7f37:/var/www/html# ls
index.php
root@08e2894e7f37:/var/www/html# rm index.php
root@08e2894e7f37:/var/www/html# ls
root@08e2894e7f37:/var/www/html# ls
root@08e2894e7f37:/var/www/html# ls
```

Data in Inside the file

```
GNU nano 2.9.3 index.html

This is my New file
<h1>This is My Module-5 Assignment</h1>
```

Exit from container image

```
root@08e2894e7f37:/var/www/html# ls
index.html
root@08e2894e7f37:/var/www/html# cat index.html
This is my New file
<h1>This is My Module-5 Assignment</h1>
root@08e2894e7f37:/var/www/html# exit
exit
salman@VM-Linux:~$
```

Module 5: Assignment - 2

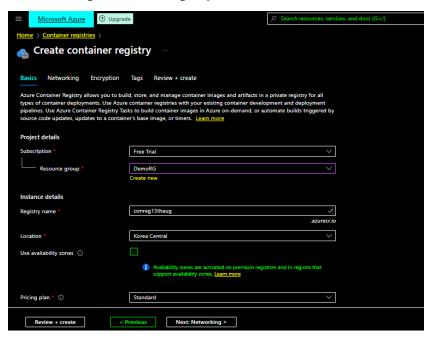
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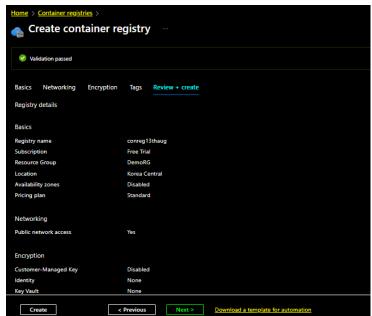


Tasks To Be Performed:

- Create an Azure Container Registry and connect it to Docker running in VM
- 2. Upload the image you created in this Azure to container registry
- 3. Create an app service to deploy the same image

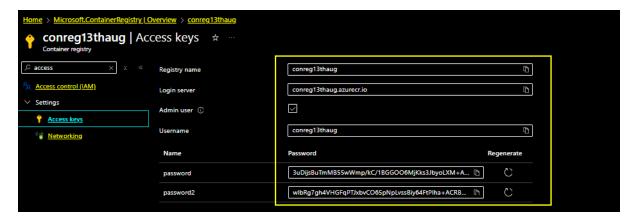
Now Creating Container Registry







Go to inside the Container Registry and search Access key we will use in further process



Now Commiting this image with login server of container registry

```
salman@VM-Linux: ~
salman@VM-Linux:~$ sudo docker images
REPOSITORY TAG IMAGE ID
REPOSITORY
                                                              CREATED
                                                                                    SIZE
                                      0cbc1f535ed8
                                                                                    303MB
hshar/webapp
                       latest
                                                              5 years ago
salman@VM-Linux:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
08e2894e7f37 hshar/webapp "/bin/sh -c 'apachec..." 19 minutes ago Up 19 minutes
salman@VM-Linux:~$ sudo docker commit 08e2894e7f37 conreg13thaug.azurecr.io/myfirstapp
sha256:0e6e1e5f005b48659952b5cf8d55286f1227157e2a435eace559edb7c1b7396b
                                                                                                                                         PORTS
                                                                                                                                                         NAMES
                                                                                                                                         80/tcp
                                                                                                                                                         myazureimage
salman@VM-Linux:~$ sudo docker images
REPOSITORY
                                                           TAG
                                                                           IMAGE ID
                                                                                                  CREATED
                                                                                                                           SIZE
                                                                           0e6e1e5f005b
conreg13thaug.azurecr.io/myfirstapp
                                                           latest
                                                                                                  4 seconds ago
                                                                                                                           303MB
hshar/webapp
                                                           latest
                                                                          0cbc1f535ed8
                                                                                                  5 years ago
                                                                                                                           303MB
salman@VM-Linux:~$
```

Now Login docker with login server of container registry and username, password

```
salman@VM-Linux:~*
salman@VM-Linux:~*
sudo docker login conreg13thaug.azurecr.io
Username: conreg13thaug
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
Login Succeeded
salman@VM-Linux:~$
```

Pushing image into container registry

```
salman@VM-Linux:~\$ sudo docker push conreg13thaug.azurecr.io/myfirstapp
Using default tag: latest
The push refers to repository [conreg13thaug.azurecr.io/myfirstapp]
9298f92df4fe: Pushed
f9445cdd87ab: Pushed
3e59a52a52d1: Pushed
754d8c63561b: Pushed
059ad60bcacf: Pushed
059ad60bcacf: Pushed
67885e448177: Pushed
ec75999a0cb1: Pushed
65bdd50ee76a: Pushed
latest: digest: sha256:32cb548174cc556f9ed97876bb368a0c7ef301c57lee07a7e76c8059f2fab9cc size: 2193
salman@VM-Linux:~\$
```

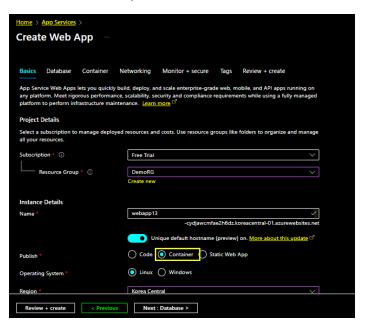
Now we can see myfirstapp in container registry



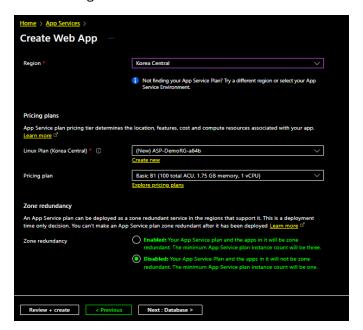
Now Creating App Services



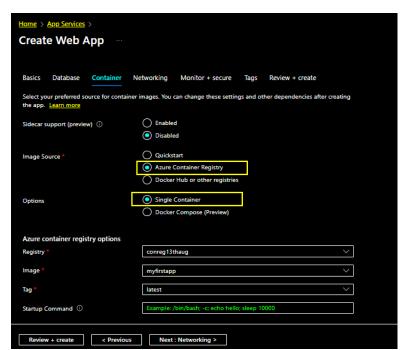
Select container in publish



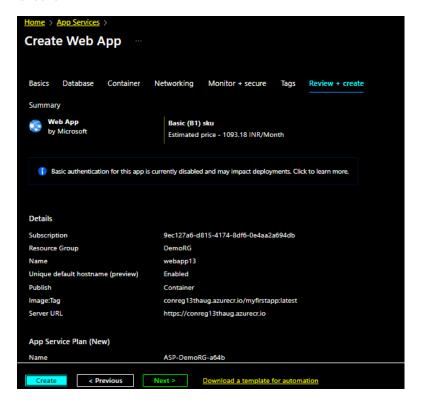
We know region korea central



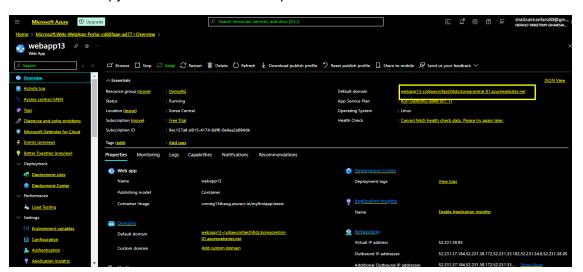
Select Azure Container Registry and single container



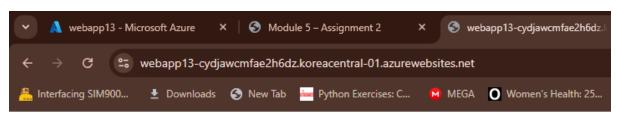
Create



Created and Copy that default domain and paste it on the browser



Assignment is completed



This is my New file

This is My Module-5 Assignment