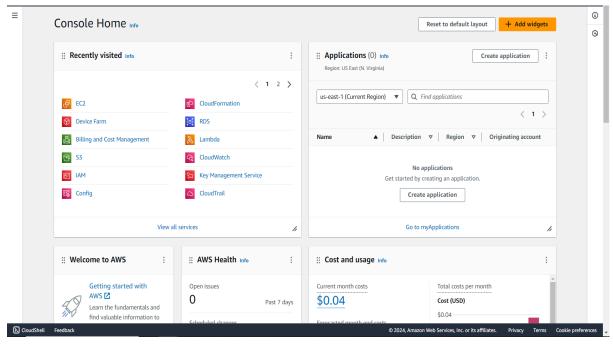
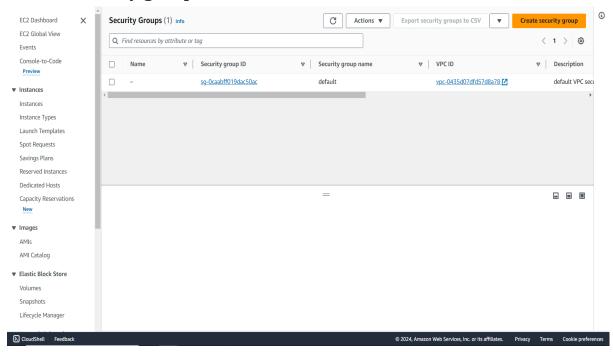
Installing docker on ec2 machine and performing life cycle operations

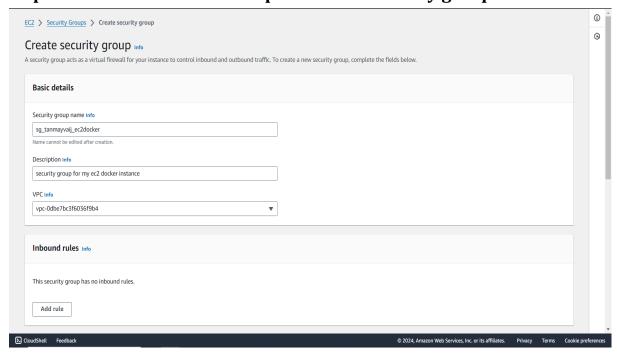
Step 1: Sign in to aws account



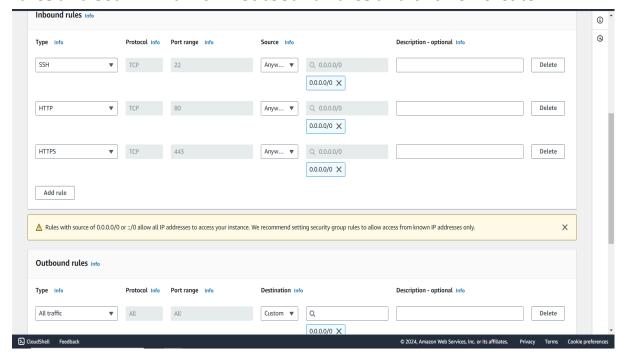
Step 2: Go to EC2 dashboard and go to security groups and click on 'Create Security group'



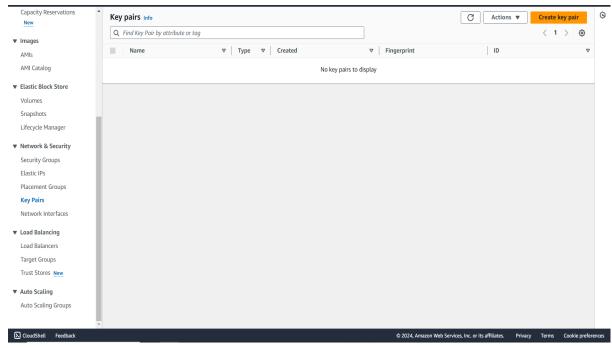
Step 3: Give a name and description to the security group



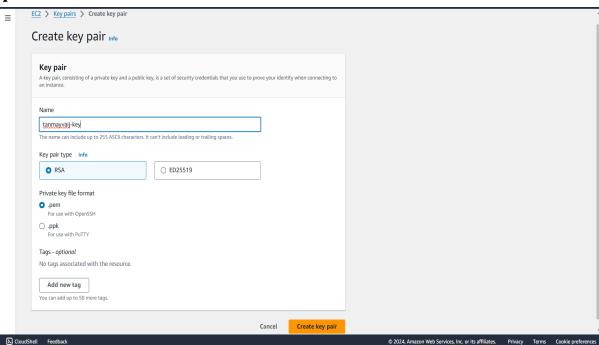
Step 4: Allow access to port 22, 80, 443 from anywhere in the inbound rules and set 'All Traffic' in outbound rules and click on create



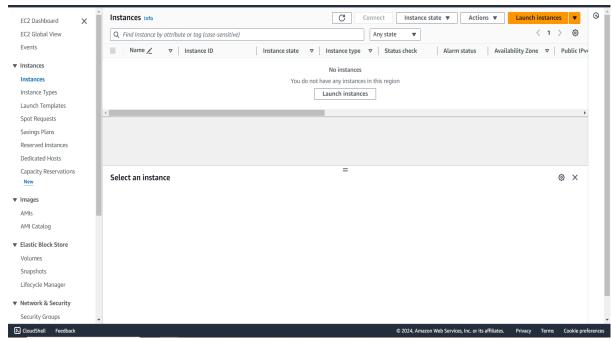
Step 5: Go the key pairs and click 'Create key pair'



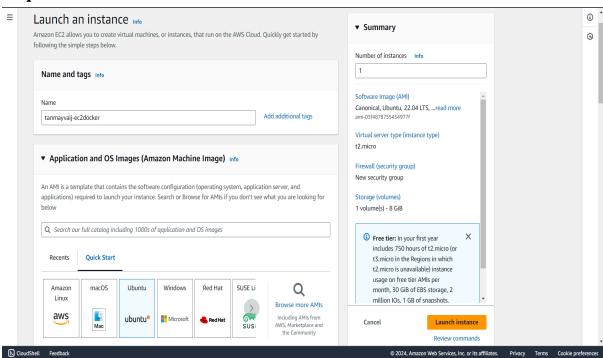
Step 6: Give a name to the key and set key pair type to RSA, file type to .pem and click on create



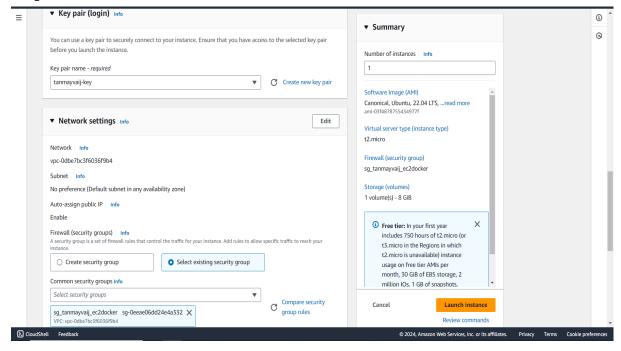
Step 7: Go to instances and click on 'Launch instances'



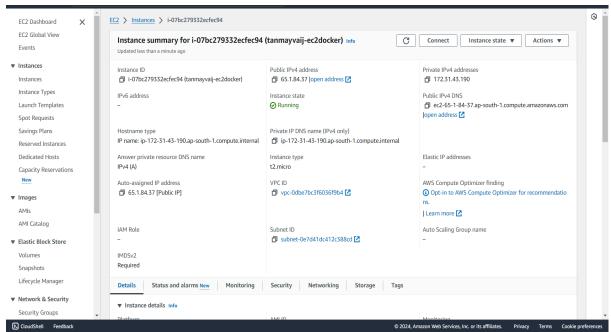
Step 8: Give a name to the instance and select Ubuntu OS



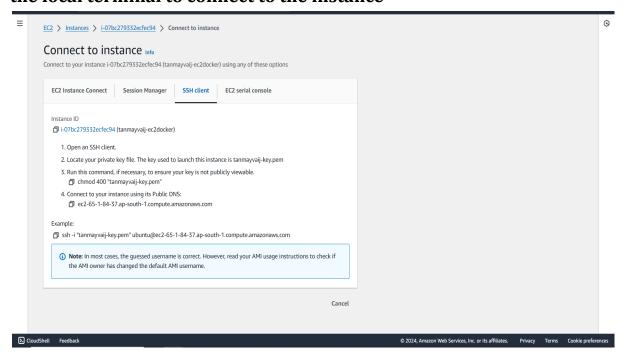
Step 9: Select security group and key pair which was created in early steps, then click on 'Launch instance'



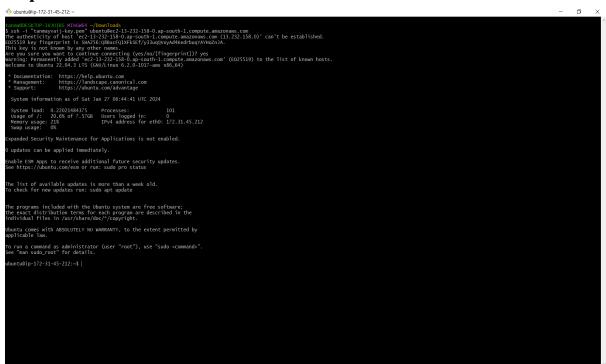
Step 10: Click on the running EC2 instance and click on connect



Step 11: Go to SSH Client and copy the example command and run it in the local terminal to connect to the instance



Step 12: Enter the command and instance will be connected



Step 13: Set up docker repository

Command:

\$ sudo apt-get update -y sudo apt-get install apt-transport-https ca-certificates curl gnupg-agent software-properties-common

Step 14: Add docker's official gpg key and add docker repository

Command:

 $\$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add - $\$ sudo add-apt-repository "deb [arch=amd64] \

https://download.docker.com/linux/ubuntu \$(lsb_release -cs) stable"

```
Wubuntu@ip_172-31-45-212:-5 curl -fssL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).

OK

Wubuntu@ip_172-31-45-212:-5 sudo add-apt-repository \

"deb [arch=amd64] https://download.docker.com/linux/ubuntu | jammy stable'
| Scisb_elease -cs) \

Scisb_elease -cs) \

Sepository: "deb [arch=amd64] https://download.docker.com/linux/ubuntu jammy stable'
| Description:
| Archive for codename: jammy components: stable |
| More info: https://download.docker.com/linux/ubuntu | jammy stable'
| Description:
| Archive for codename: jammy components: stable |
| More info: https://download.docker.com/linux/ubuntu | jammy-load.docker_com_linux_ubuntu-jammy.list |
| Adding deb serve to / tec/apt/sources.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list |
| Adding deb serve to / tec/apt/sources.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list |
| Adding disabled deb-serve to / tec/apt/sources.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list |
| Adding disabled deb-server.dependent to / tec/apt/sproutes.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list |
| Adding disabled deb-server.dependent to / tec/apt/sproutes.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list |
| Adding disabled deb-server.dependent to / tec/apt/sproutes.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list.d/archive_url=https_download_docker_com_linux_ubuntu-jammy.list.d/archive_url=https_download_docker_com_linux_ubuntu
```

Step 15: Change to root user and start hello-world container

Command:

\$ sudo su

\$ docker run hello-world

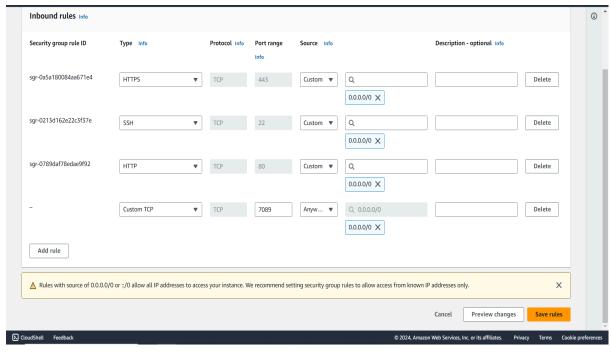
"Container becomes dead immediately after running the container"

Step 16: Run nginx container

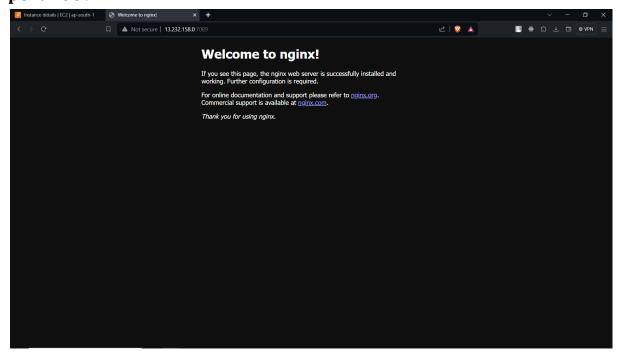
Command:

\$ docker --name tanmaywebserver -p 7089:80 -d nginx

Step 17: Add port 7089 to inbound rules in the security group



Step: 18: Copy public ip of instance and paste it in the browser url with port 7089



Step 19: Run redis container

Command:

\$ docker run -d redis

```
        ✓ Pox889-172-31-45-212; /home/ubuntu# docker run - d redis

        cac37a609ad0b5f52a00613a9e83aaa290f8e06b5a38707fddo6sesee148c720

        root@ip-127-31-45-212; /home/ubuntu# docker images

        REPOSITORY
        TAG

        IAMACE JD
        CREATED

        SZE

        REPOSITORY
        TAG

        IAMACE JD
        CREATED

        SIZE

        REPOSITORY TAG
        1MACE JD

        CREATED STATES
        1359cg

        REPOSITORY TAG
        1452-127

        JEW HORSE STATES
        1452-127

    <tr
```

Step 20: Stop and restart redis container

Stop redis container -> \$ docker stop cac37a609ad0 Restart redis container -> \$ docker start cac37a609ad0

	2: /home/ubuntu				=	o ×
		/ubuntu# docker ps -a				^
CONTAINER ID cac37a609ad0	IMAGE redis	COMMAND "docker-entrypoint.s"	CREATED 2 minutes ago	STATUS Up 2 minutes	PORTS 6379/tcp	NAMES infall
ible_stonebral		docker -entryponners	2 milliaces ago	op 2 minutes	03/3/ ECP	IIII a I I
386ec2c765b5 gic_hamilton	redis	"docker-entrypoint.s"	2 minutes ago	Exited (1) 2 minutes ago		nostal
0264361be967 webserver	nginx	"/docker-entrypoint"	10 minutes ago	Up 10 minutes	0.0.0.0:7089->80/tcp, :::7089->80/tcp	tanmay
cfb211222540 sting brattair	hello-world	"/hello"	18 minutes ago	Exited (0) 18 minutes ago		intere
sting_blatcal						
root@ip-172-31-45-212:/home/ubuntu# docker stop cac37a609ad0						
cac37a609ad0						
		/ubuntu# docker ps -a	CDEATED	CTATUS	BORTS	NAMES
CONTAINER ID cac37a609ad0	IMAGE redis	COMMAND "docker-entrypoint.s"	CREATED 3 minutes ago	STATUS Exited (0) 4 seconds ago	PORTS	NAMES infall
ible_stonebral		docker enerypointers	J militaces ago	Exited (0) + Seconds ago		man
386ec2c765b5 gic_hamilton	redis	"docker-entrypoint.s"	4 minutes ago	Exited (1) 3 minutes ago		nostal
0264361be967	nginx	"/docker-entrypoint"	11 minutes ago	Up 11 minutes	0.0.0.0:7089->80/tcp, :::7089->80/tcp	tanmay
webserver	h-1114	U /b - 33 - U	10			
cfb211222540 sting_brattair	hello-world	"/hello"	19 minutes ago	Exited (0) 19 minutes ago		intere
scng_blactan root@jp-172-31-45-212:/home/ubuntu# docker start cac37a609ad0						
cac 37a609ad0						
		′ubuntu# docker ps -a				
CONTAINER ID	IMAGE redis	COMMAND	CREATED	STATUS	PORTS	NAMES
cac37a609ad0 ible_stonebral		"docker-entrypoint.s"	4 minutes ago	Up 4 seconds	6379/tcp	infall
386ec2c765b5 gic_hamilton	redis	"docker-entrypoint.s"	4 minutes ago	Exited (1) 4 minutes ago		nostal
0264361be967 webserver	nginx	"/docker-entrypoint"	12 minutes ago	Up 12 minutes	0.0.0:7089->80/tcp, :::7089->80/tcp	tanmay
cfb211222540		"/hello"	19 minutes ago	Exited (0) 19 minutes ago		intere
sting_brattain roor@ip-172-31-45-212:/home/ubuntu#						
100ce1p 1/2 3	13 212:////	abarrean				
						~

Step 21: Pause and Unpause redis container

Pause redis container -> \$ docker pause cac37a609ad0 Unpause redis container -> \$ docker unpause cac37a609ad0

```
2-31-45-212:/home/ubuntu# docker ps -a
COMMAND
                                                                          STATUS
Up 3 minutes (Paused)
                                                       CREATED
8 minutes ago
                                                                                                        PORTS
6379/tcp
                             "docker-entrypoint.s..." 8 minutes ago
                                                                          Exited (1) 8 minutes ago
                                                                                                                                                    nostal
                             "/docker-entrypoint..." 15 minutes ago
                                                                          Up 15 minutes
                                                                                                        0.0.0.0:7089->80/tcp, :::7089->80/tcp
                                                        23 minutes ago
                                                                          Exited (0) 23 minutes ago
                             COMMAND CREATED STATUS
"docker-entrypoint.s..." 8 minutes ago Up 3 minutes
                                                                                                        PORTS
6379/tcp
ebserver
fb211222540 hello-world "/hello"
cing_brattain
pot@ip-172-31-45-212:/home/ubuntu#|
```

Step 22: Kill redis container

Kill redis container -> \$ docker kill cac37a609ad0

```
| Post |
```

Step 23: Stop, restart and pause nginx container

Stop nginx container -> docker stop 0264361be967 Restart nginx container -> docker start 0264361be967 Pause nginx container -> docker pause 0264361be967

```
NAMES
infallible_stonebraker
nostalgic_hamilton
tanmaywebserver
interesting_brattain
            765b5 redis "docker-entrypoint.s." 14 minu
be967 nginx "docker-entrypoint.s." 14 minu
22540 hello-world "/hello" 29 minu
-172-31-45-212:/home/ubuntu# docker start 0264361be967
be967
              172-31-45-212:/home/ubuntu# docker ps -a
ER ID IMAGE COMMAND
                                                                                                                    CREATED
                                                                                                                                                           STATUS
                                                                                                                                                                                                                                       PORTS
 MES "docker-entrypoint.s...
ic37a609ad0 redis "docker-entrypoint.s...
ifallible_stonebraker
i6e22c765b5 redis "docker-entrypoint.s...
i6436lbe967 nginx "/docker-entrypoint....
immaywebserver
ib211222540 hello-world "/hello"
                                                                                                                                                         Exited (137) About a minute ago
                                        "docker-entrypoint.s.." 14 minutes ago Exited (1) 14
"docker-entrypoint..." 22 minutes ago Up 3 seconds
"/docker-entrypoint..." 22 minutes ago Up 3 seconds
                                                                                                                                                         Exited (1) 14 minutes ago
    rirzzz340 hello-world "/hello" 29 minute
eresting_brattain
r@ip-172-31-45-212:/home/ubuntu# docker pause 0264361be967
r@ip-172-31-45-212:/home/ubuntu#
                                                                                                                    29 minutes ago Exited (0) 29 minutes ago
                     .7
|-31-45-212:/home/ubuntu# docker ps -a
|D IMAGE COMMAND
                                        E COMMAND

s "docker-entrypoint.s..." 14 minutes ago Exited (137) About a minute ago
ker

s "docker-entrypoint.s..." 14 minutes ago Exited (1) 14 minutes ago

x "/docker-entrypoint...." 22 minutes ago Up 19 seconds (Paused)
AWES
ac37a609ad0 redis "docker-e
ac37a609ad0 redis "docker-e
ac47a61b1e_stonebraker
86ec2c765b5 redis "docker-e
sostalgic_hamilton "/docker-
amaywebserver
fb211222540 hello-world "/hello"
nteresting_brattain
oot@ip-172-31-45-212:/home/ubuntu#
                                                                                                                                                                                                                                       0.0.0.0:7089->80/tcp, :::7089->80/tcp
                                                                                                                     30 minutes ago Exited (0) 29 minutes ago
```

Step 24: Unpause and kill nginx container

Unpause nginx container: docker unpause 0264361be967 Kill nginx container: docker kill 0264361be967

```
o-172-31-45-212:/home/ubuntu# do<u>cker</u>
 :04301B996/
Dor@ip=172-31-45-212:/home/ubuntu# docker ps -a
DNTAINER ID IMAGE COMMAND
ca37a609ad0 redis "docker-entrypoint.s
ible_stonebraker"
                                                                                                                                                                                             PORTS
                                                                                                     CREATED STATUS
19 minutes ago Exited (137) 6 minutes ago
                                                                                                                                                                                                                                                                          NAMES
infal
                                                    COMMAND
"docker-entrypoint.s.."
ible_stonebraker
186ec2c765b5 redis
gic_hamilton
1264361be967 nginx
webserver
ifb211222540 hello-w
                                       "docker-entrypoint.s.." 19 minutes ago Exited (1) 19 minutes ago
"/docker-entrypoint..." 26 minutes ago Up 4 minutes
                                                                                                                                                                                                                                                                          nosta
                                                                                                                                                                                            0.0.0:7089->80/tcp, :::7089->80/tcp
                        hello-world "/hello"
                                                                                                    34 minutes ago Exited (0) 34 minutes ago
                                                                                                                                                                                                                                                                          inter
     ng_brattain
@ip-172-31-45-212:/home/ubuntu# docker kill 0264361be967
|361be967
   4361be967

train=172-31-45-212:/home/ubuntu# docker ps -a

train=172-31-45-212:/home/ubuntu# docker ps -a

train=172-31-45-212:/home/ubuntu# docker ps -a

train=172-31-45-212:/home/ubuntu#
                                                                                                                                                                                                                 NAMES
infallible_stonebraker
nostalgic_hamilton
tanmaywebserver
interesting_brattain
```