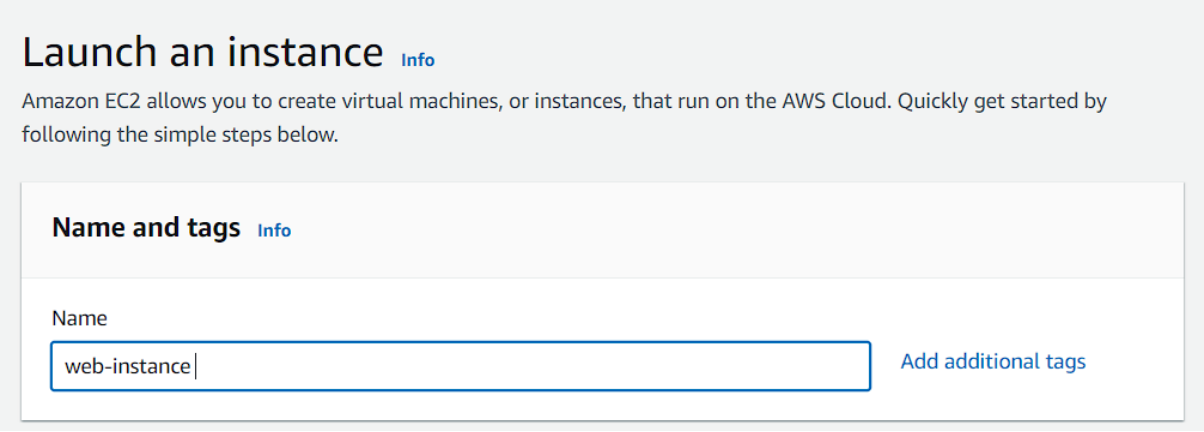
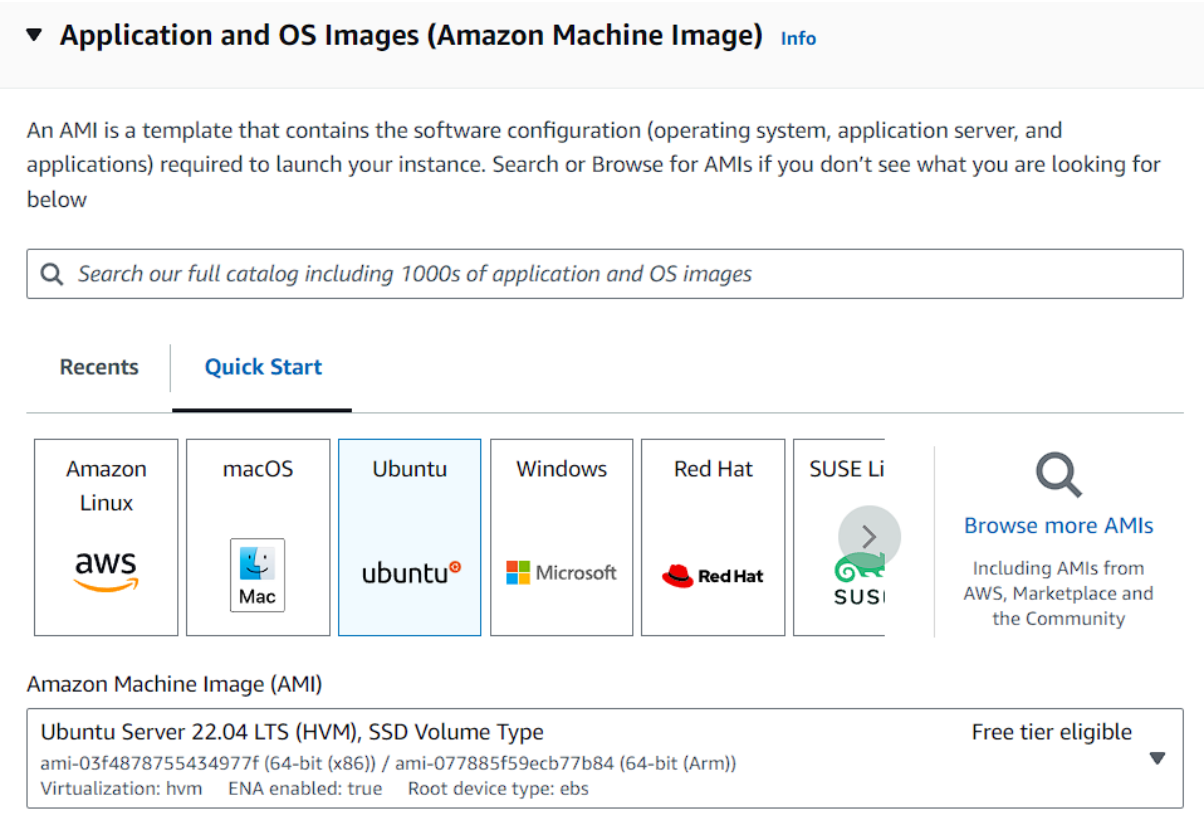
😊 Launching EC2 Instance in VPC

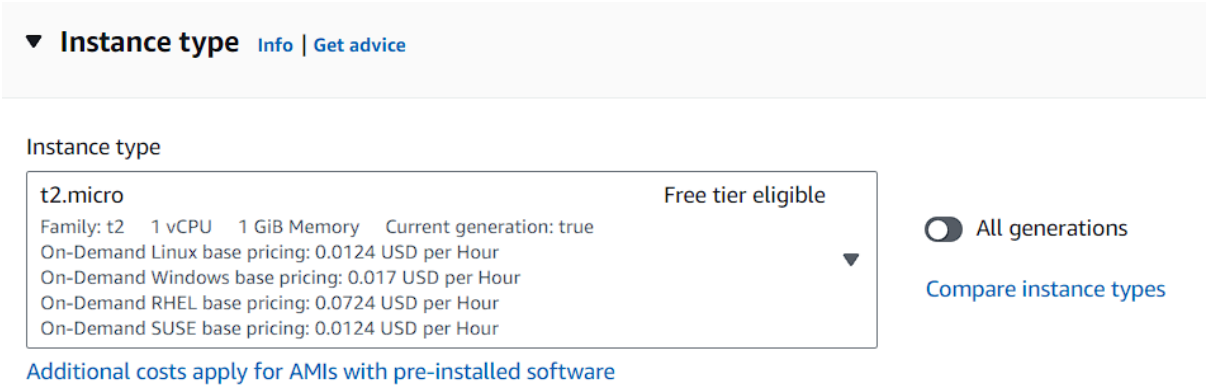
1. Now navigate to EC2 and click on launch instance.
2. Then give your instance a name.



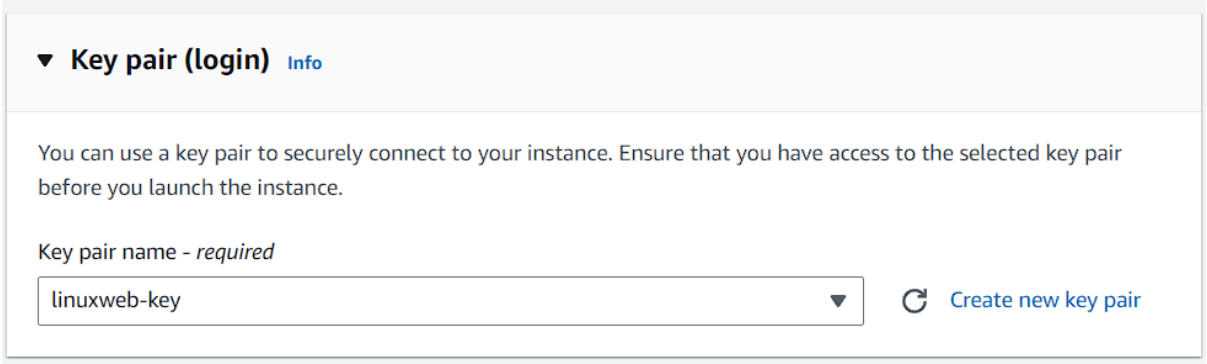
3. Then select your OS as ubuntu.



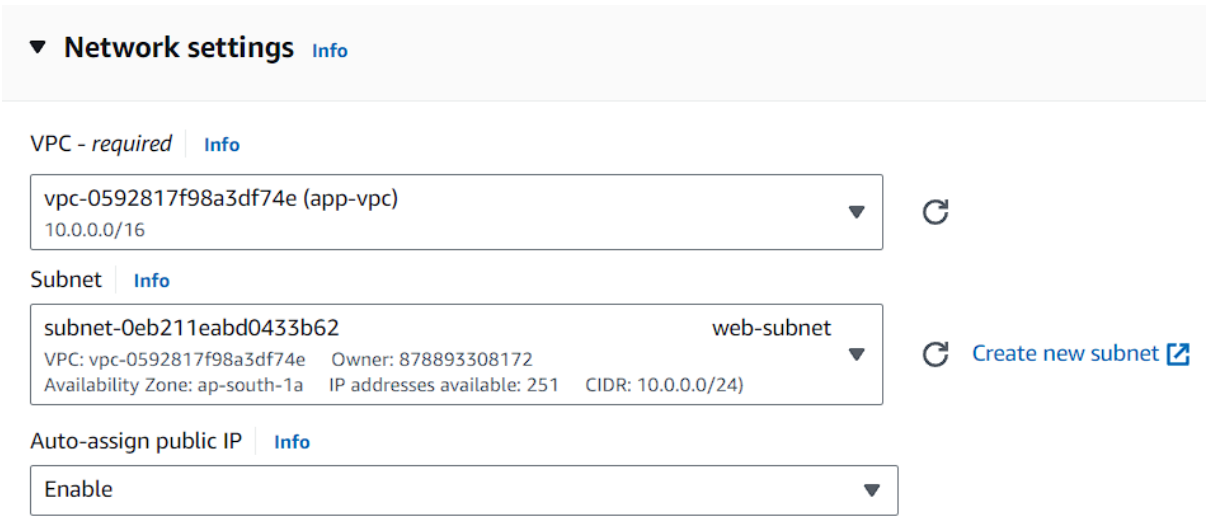
4. Select the instance type as t2.micro because it is free tier eligible.



5. Then select your key pair.



6. Now for the network settings choose the VPC that you created.
7. Then choose the web subnet for it. And enable auto assign public IP.



8. For the security groups create a new group. Name your security group if you want to.

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

(•) Create security group ( ) Select existing security group

Security group name - *required*

web-security-group

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*

Description - *required* Info

web-security-group

9. The for the inbound security group rules, add HTTP with port 80 and allow traffic from everywhere by selecting CIDR block as 0.0.0.0/0

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove

Type Info	Protocol Info	Port range Info
ssh	TCP	22

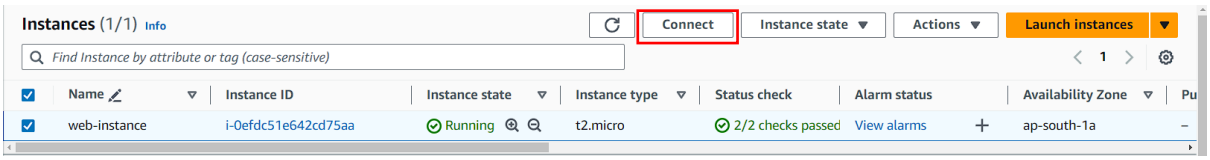
Source type Info	Source Info	Description - *optional* Info
Anywhere	Add CIDR, prefix list or security	e.g. SSH for admin desktop
	0.0.0.0/0 ×	

▼ Security group rule 2 (TCP, 80, 0.0.0.0/0) Remove

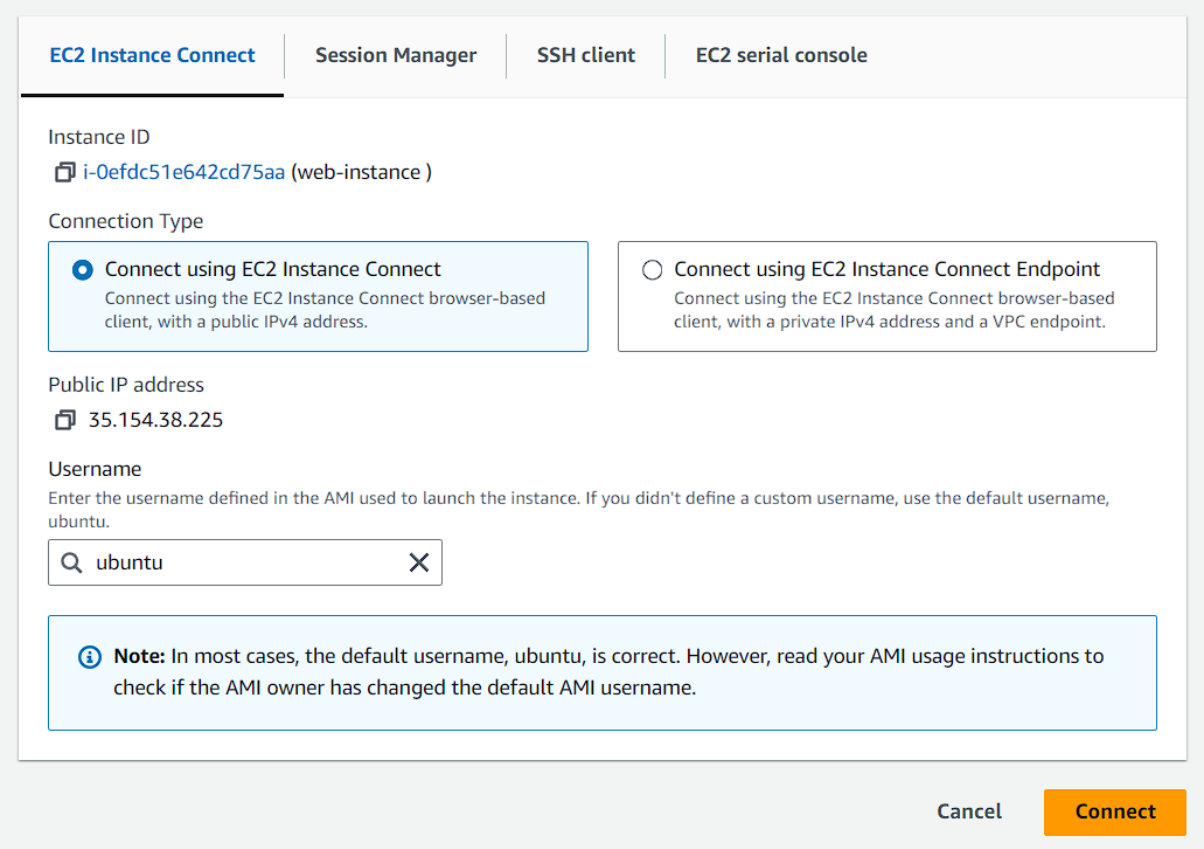
Type Info	Protocol Info	Port range Info
HTTP	TCP	80

Source type Info	Source Info	Description - *optional* Info
Custom	Add CIDR, prefix list or security	e.g. SSH for admin desktop
	0.0.0.0/0 ×	

10. After that launch your instance.
11. Once you instance is launched, now click on connect



12. Connect by using EC2 instance connect. You can also use Putty app to connect your instance. It totally depends on your choice which medium you want to connect with your instance.
13. Now click on connect.



14. A new page will open in the new tab it will say that your instance has established the connection successfully.

```
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-1017-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Tue Jan 16 19:11:52 UTC 2024

  System load:  0.0               Processes:             96
  Usage of /:   20.6% of 7.57GB   Users logged in:       0
  Memory usage: 21%               IPv4 address for eth0: 10.0.0.33
  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 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.

ubuntu@ip-10-0-0-33:~$
```

15. Now you need to run two commands one is for updating your instance and the other is for installing nginx webserver on your instance.
    sudo apt-get update
    sudo apt-get install nginx
16. Once both the commands have run successfully now you need to copy the public IP address of your instance and paste it in a new tab.
17. You will see that nginx webserver is up and running successfully.