1) Go to AWS EC2 site
2) Create an AWS account
   It will ask for credit card information, phone number, and email address.
3) Log in to AWS
4) Click “Services” at the top left corner to display all the services AWS provided.
   Choose EC2
5) Now we are on the EC2 dashboard page.
6) Click “Instances” with a 1 followed. This link means there is only one instance (virtual remote machine) that is currently running.
7) Now is the steps to launch a new instance by clicking “Launch Instances”, a big orange button at the top right corner.
    a) **Step1**: Choose an Amazon Machine Image (AMI)
       We can pick whatever instances we want. These are sort of standard instances that AWS provides. We are going to choose the first one, nothing special. Amazon Linux 2 AMI
    b) **Step2**: Choose an Instance Type
       Now we can pick the size of the instance we want.
       Normally t2.small with 2GB memory, low to moderate network performance, and IPv6 Support would be enough for a simple project. It is a sort of general-purpose type instance.
       But since t2.micro with 1GB is free tier eligible, we pick this as a practice.
       We can transfer to a bigger one if needed.
       To check which instance type fits us best, go check AWS instance types.
       Or check pricing at Amazon EC2 On-Demand Pricing.
       It appears that different regions have different pricing, and by comparison, N.vergina is cheaper than Canada central. But free is free.
       Click “Next: Configure Instance Details”
    c) **Step3**: Configure Instance Details
       Normally we can leave the configuration settings to default.
       Click “Next: Add Storage”
    d) **Step4**: Add Storage
       By default, it sparks an 8GB drive, depends on what we plan on doing, configures how big the drive we need. We can change this size number.
       Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage.
    e) **Step5**: Add Tags
       I have no idea what tags are and what they do.
    f) **Step6**: Configure Security Group
       By default, all instances do not have a firewall at all. We manage the firewall from this console. But to simulate a normal Linux distribution environment, I applied the existing default VPC security group.
    g) **Step7**: Review Instance Launch
       Click “Launch”
       We can create a key pair for better security. A key pair consists of a public key that AWS stores, and a private key file that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your

instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

h) **DONE** !!

8) We can review the status of the new instance as the EC2 dashboard. And it should be running right now.
9) If you noticed, the “Public IPv4 address” is blue. This means the IP address is dynamic IPs, not fixed. Changes or maintenance to our network can result in having a new IP address assigned, but there is no set time for this to occur.
   If we do not want it to change, we can assign it to an elastic IP.
   a) In the left side menu, under Network & Security title, there is a link called Elastic IPs. Here are all the elastic IPs for all our boxes of which we only have one.
   b) “Allocate Elastic IP address”. The elastic IPs come from Amazon’s pool of IPv4 addresses.
   c) “Allocate” It will show up an IP that is not associated with any instance. This is the one it sparked for us, an IP we can use.
   d) Rename it for easier to find it.
   e) Now we can associate it with a box or instance.
      “Actions” → “Associate Elastic IP address”
      Select the instance we just launched.
   f) Now if we go back to our instance that is running, it has an elastic IP associated. And it won’t change now.
10) Snapshot
    At any time, we can take snapshots of exactly what it is like of the server at any given time. Configurations, setting, environments.
    a) Right-click the instance, image and templates, create an image.
    b) Give it a name
    c) Create Image.

Now it will reboot the box. Because it has to shut the instance down in order to create a proper image. We have our machine exactly how it was right now and we can spark it up anytime later again.

If we go to AMIs in the left menu, we can find the test image we just created. We can click “Launch” to use it. It is like a backup of the server.

MariaDB root password: VSB_Plus OR vsbplus