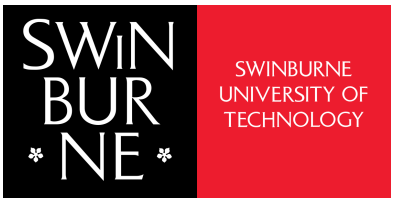

ACF Lab 5: Build Your DB Server and Interact With Your DB Using an App

June 11, 2023

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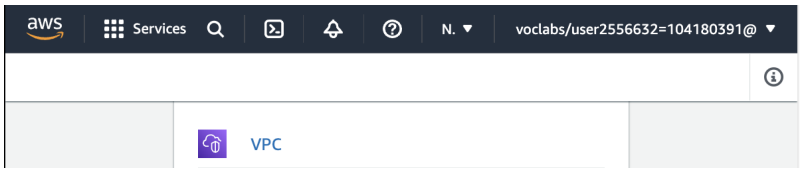
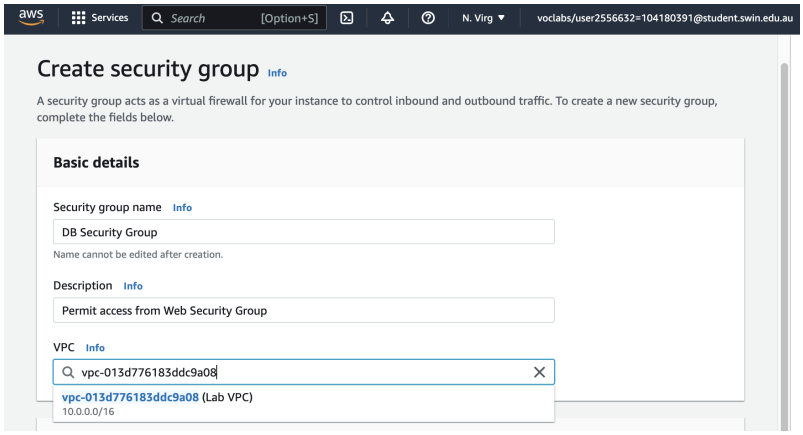
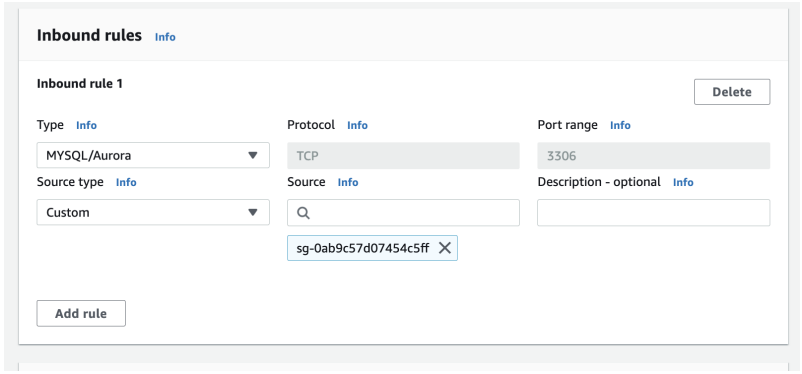
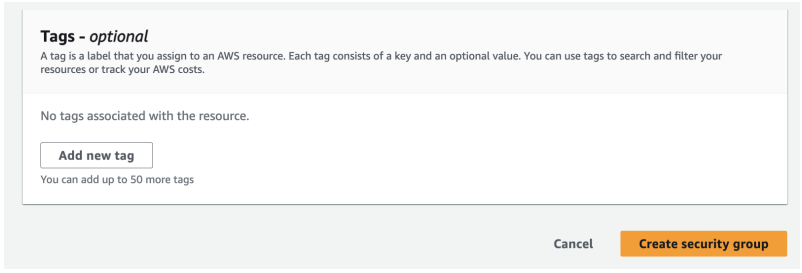
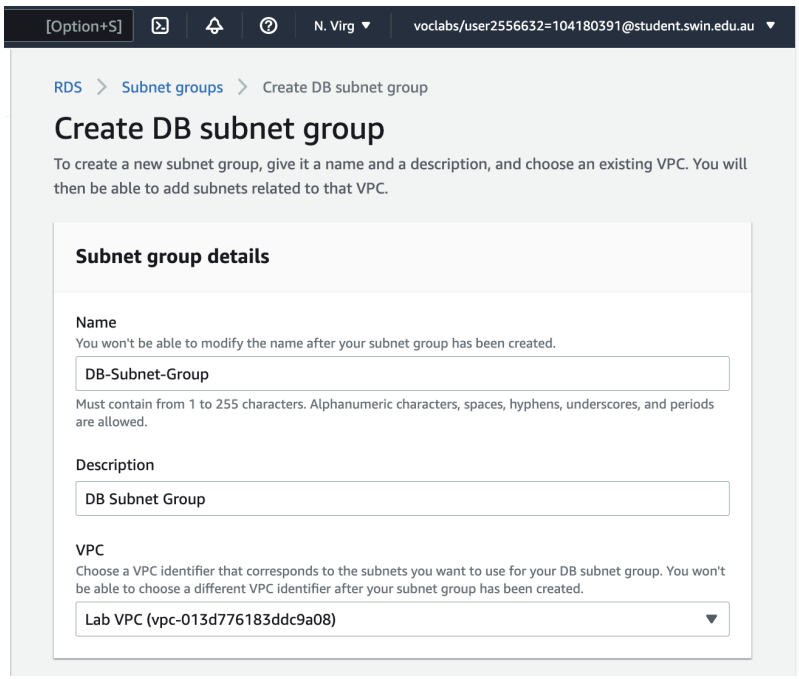
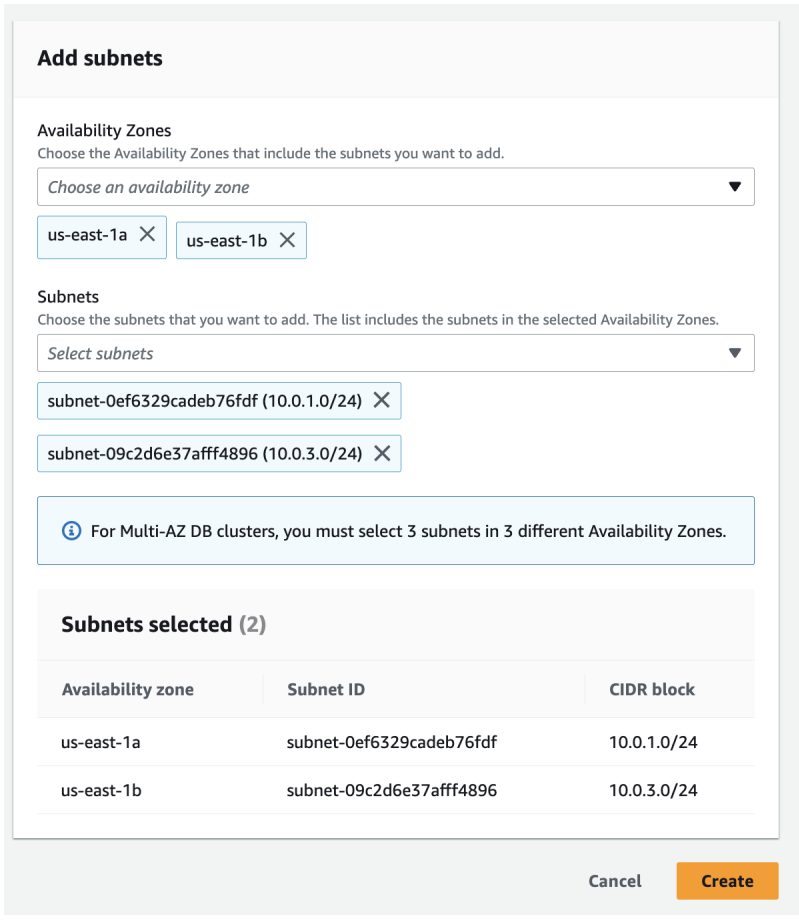
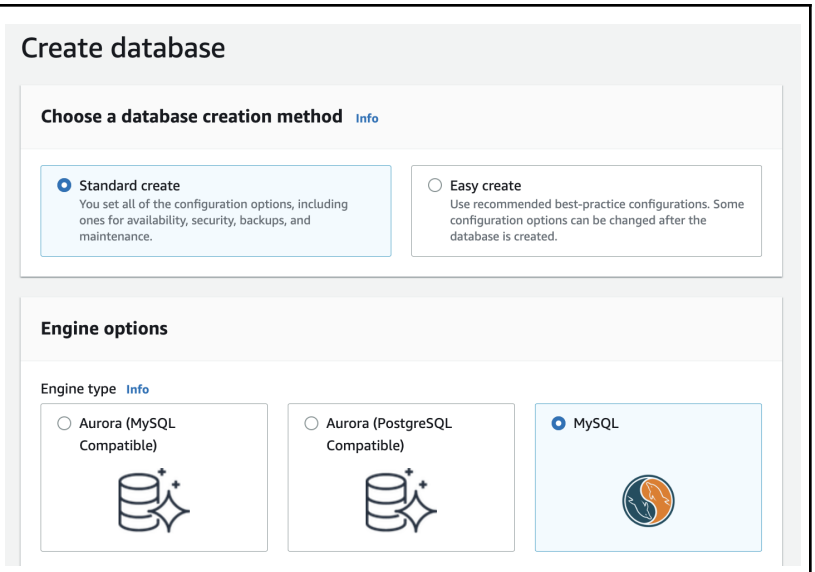
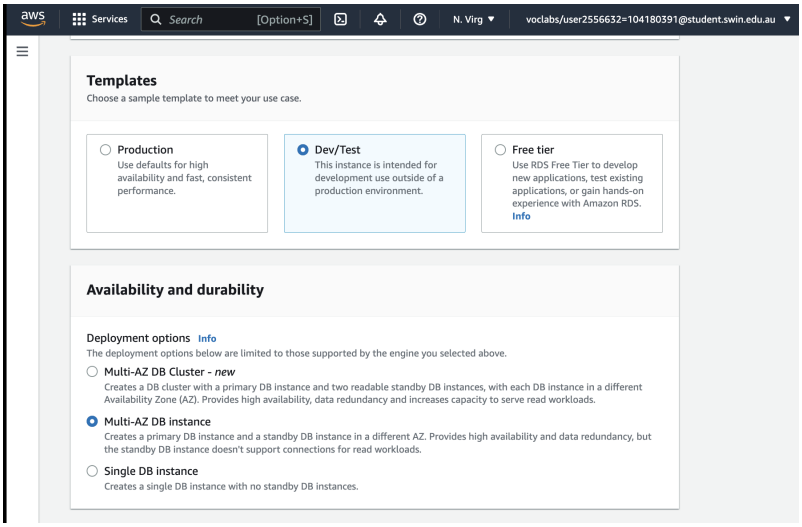
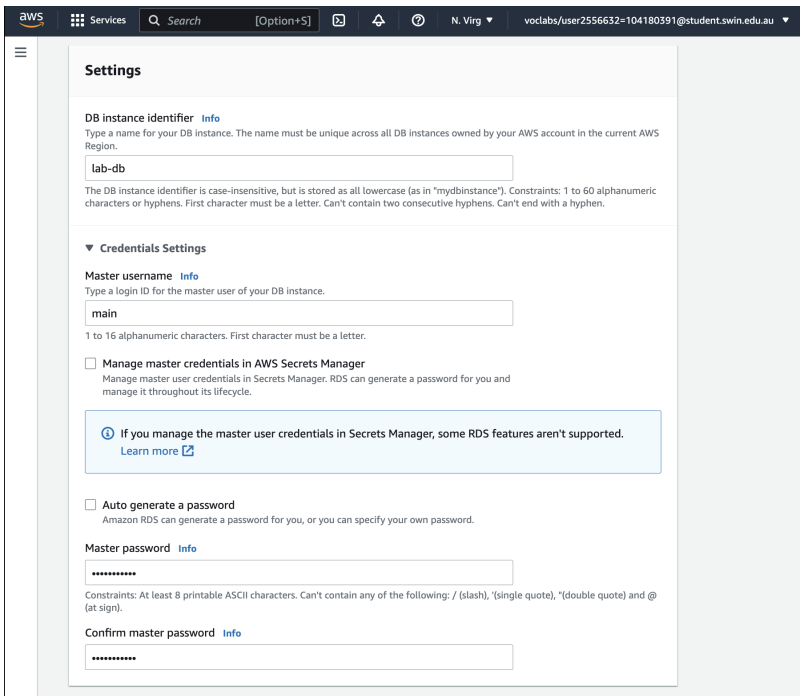
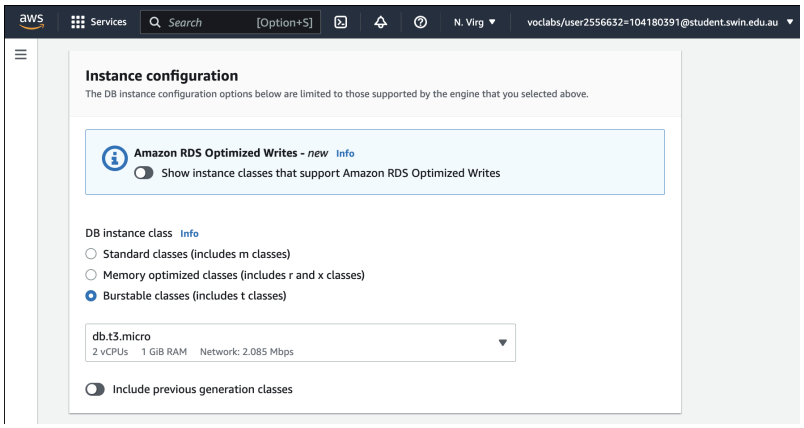
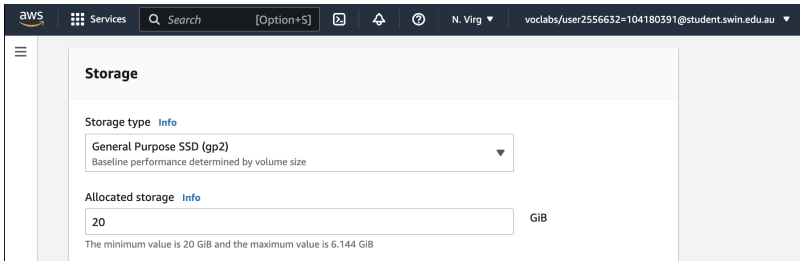
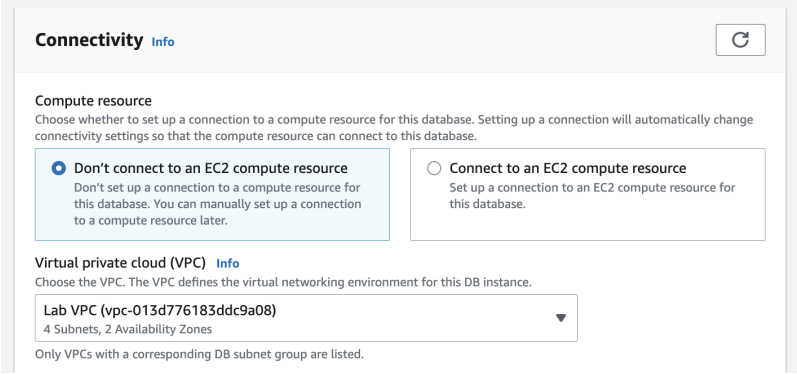
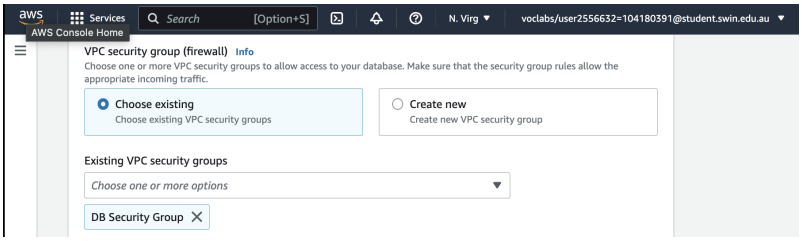
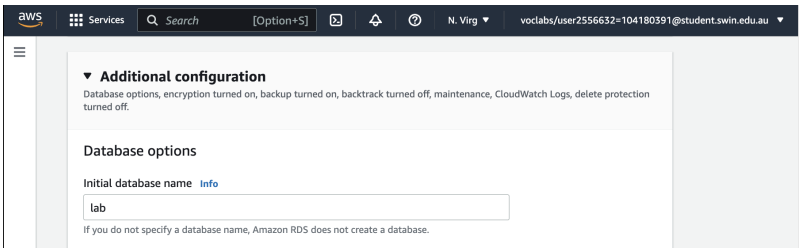
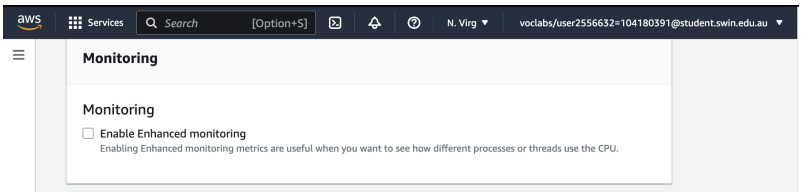
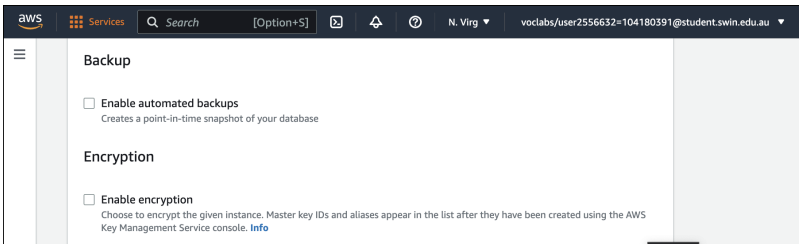
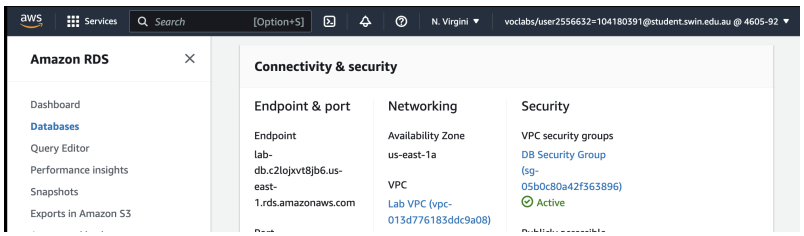
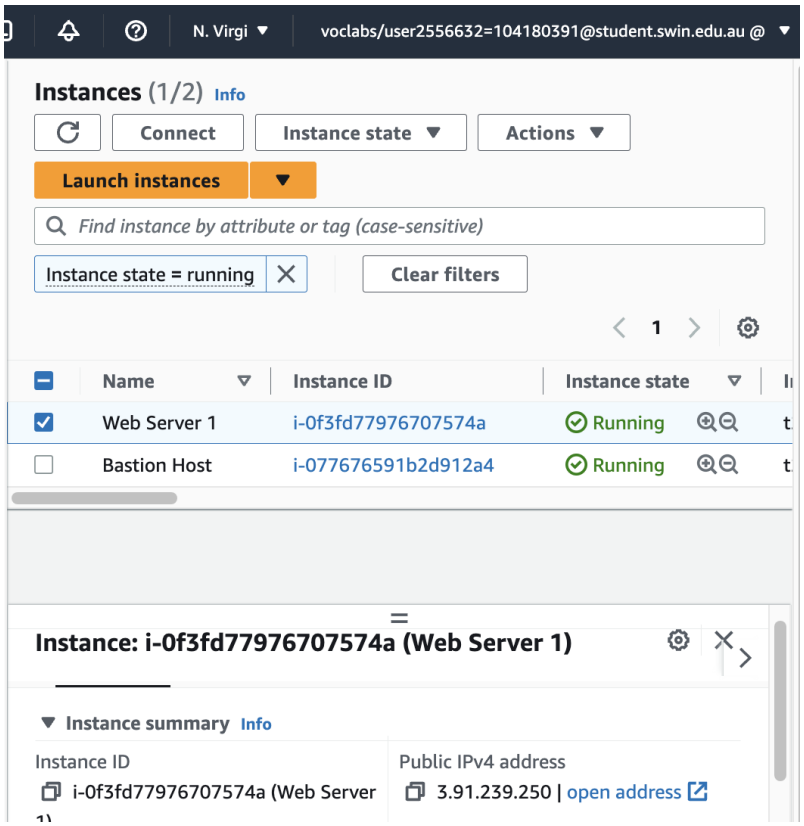
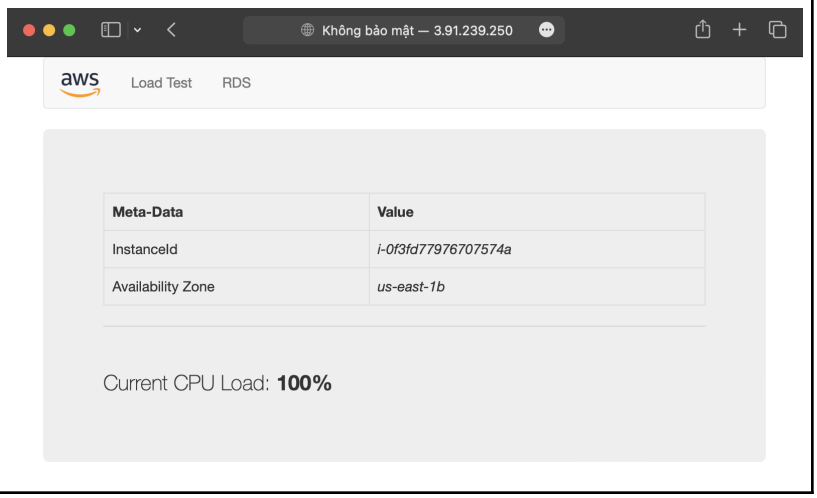
Step	Description	Screenshot
1	In the AWS Management Console, on the **Services** menu, choose **VPC**.	
2	In the left navigation pane, choose **Security Groups**. Choose **Create security group** and then configure: - **Security group name**: DB Security Group - **Description**: Permit access from Web Security Group - **VPC**: Lab VPC	
3	In the **Inbound rules** pane, choose **Add rules**. Configure the following settings: - **Type**: MySQL/Aurora (3306) - **Source**: Select **Web Security Group**.	
4	Choose **Create security group**.	

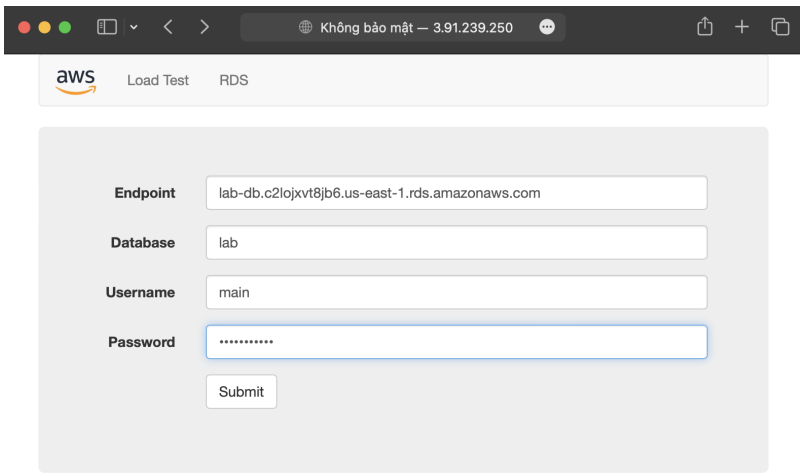
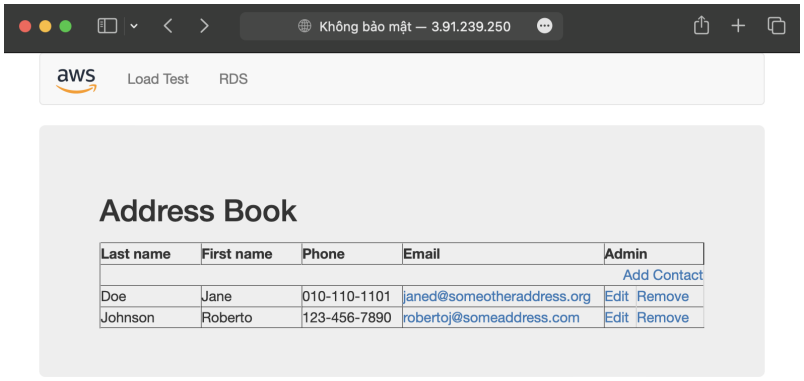
5	On the **Services** menu, choose **RDS**. In the left navigation pane, choose **Subnet groups**. Choose **Create DB Subnet Group** then configure: - **Name**: DB-Subnet-Group - **Description**: DB Subnet Group - **VPC**: Lab VPC	
6	Scroll down to the **Add Subnets** section. Expand the list of values under **Availability Zones** and select the first two zones: **us-east-1a** and **us-east-1b**. Expand the list of values under **Subnets** and select the subnets associated with the CIDR ranges **10.0.1.0/24** and **10.0.3.0/24**. Choose **Create**.	

7	In the left navigation pane, choose **Databases**. Choose **Create database**. Select **MySQL** under **Engine Options**.	
8	Under **Templates** choose **Dev/Test**. Under **Availability and durability** choose **Multi-AZ DB instance**.	

9	Under **Settings**, configure: - **DB instance identifier**: lab-db - **Master username**: main - **Master password**: lab-password - **Confirm password**: lab-password	
10	Under **DB instance** class, configure: - Select **Burstable classes (includes t classes)**. - Select **db.t3.micro**	
11	Under **Storage**, configure: - **Storage type**: General Purpose (SSD) - **Allocated storage**: 20	

12	Under **Connectivity**, configure: - **Compute resource**: Don't connect to an EC2 compute resource. - **Virtual Private Cloud (VPC)**: Lab VPC.	
14	Under **Existing VPC security groups**, from the dropdown list: - Choose **DB Security Group**. - Deselect **default**.	
15	Expand **Additional configuration**, then configure **Initial database name**: lab	
16	Uncheck **Enable Enhanced monitoring**.	
17	Uncheck **Enable automatic backups**. Uncheck **Enable encryption**.	

18	Choose **lab-db**. Scroll down to the **Connectivity & security** section and copy the **Endpoint** field.	
19	Choose on the **Details** drop down menu above these instructions, and then choose **Show** and copy the **Web Server** IP address.	
20	Connect to Web Server IP address. The web application will be displayed, showing information about the EC2 instance. Choose the **RDS** link at the top of the page to configure the application to connect to the database.	

21	Configure the following settings: - **Endpoint**: Paste the Endpoint copied earlier. - **Database**: lab - **Username**: main - **Password**: lab-password Choose **Submit**.	
22	A message will appear explaining that the application is running a command to copy information to the database. After a few seconds the application will display an **Address Book**. The **Address Book** application is using the RDS database to store information.	
23	Test the web application by adding, editing and removing contacts.