

Thanks, Pratheek! You're doing a great **cloud computing experiment**, and I'll walk you through **both parts**:

Experiment Steps — With Full Instructions

Step 1: Create VPC, Subnet, Route Table, and Internet Gateway

These are **networking components** that your RDS database needs to run inside a secure environment.

A. Create a VPC

1. Go to AWS Console → Search **VPC** → Click **"Your VPCs"**
 2. Click **Create VPC**
 - Name tag: ``MyVPC``
 - IPv4 CIDR block: ``10.0.0.0/16``
 - Leave others default
 3. Click **Create VPC**
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B. Create a Subnet

1. Go to **Subnets** → Click **Create subnet**
 2. Select **MyVPC**
 3. Name tag: ``MySubnet``
 4. Availability Zone: Choose any (e.g., ``us-east-1a``)
 5. IPv4 CIDR block: ``10.0.1.0/24``
 6. Click **Create subnet**
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C. Create an Internet Gateway

1. Go to **Internet Gateways** → Click **Create Internet Gateway**
 2. Name tag: ``MyIGW`` → Click **Create**
 3. Select it → Click **Actions** → **Attach to VPC**
 4. Choose **MyVPC**
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D. Create Route Table & Associate

1. Go to **Route Tables** → Click **Create route table**
2. Name tag: ``MyRouteTable``
3. Select **MyVPC**

4. Click **Create**

 Now edit routes:

1. Select your route table → Go to **Routes tab** → **Edit routes**
2. Add route: ``0.0.0.0/0`` → Target: Select **MyIGW**
3. Save

 Then associate with subnet:

1. Go to **Subnet Associations tab** → **Edit subnet associations**
2. Check ``MySubnet`` → Save

✓ **Step 2: Create Relational Database OR Estimate Cost**

Now choose **one of two paths**:

Option A: Create RDS SQL Server (Actual DB)

1. Go to AWS Console → Search **RDS**
2. Click **Create Database**
3. Choose **"Standard create"**
4. **Engine options**:
 - Engine type: **SQL Server**
 - Edition: e.g., **SQL Server Standard**
5. Choose **RDS Custom** (not RDS managed)
6. Choose deployment option: **Multi-AZ or Single-AZ**
7. **Licensing model**: Bring your own or license included
8. Select **DB instance size** (e.g., ``db.m5.large``)
9. Set DB name, username, password
10. Choose **VPC = MyVPC**, Subnet = MySubnet
11. Enable **Public access = Yes** if needed

Click **Create Database**

 Wait for 5-10 mins to complete setup.

Option B: Use AWS Pricing Calculator for RDS SQL Server

1. Go to: <https://calculator.aws.amazon.com>
2. Click **Create Estimate**

3. Click **Add Service** → Choose **RDS**


4. Fill in details:

- **Region:** your region (e.g., `US East (N. Virginia)`)
- **Database engine:** **SQL Server**
- **Edition:** Choose one (e.g., **Enterprise** or **Standard**)
- **Deployment:** Choose **RDS Custom**
- **License:** Choose between **License Included** or **BYOL**
- **Pricing Model:** On-demand or Reserved
- **Instance type:** e.g., `db.m5.large`
- **Storage:** e.g., 100 GiB

5. Scroll down → Click **Add to My Estimate**

6. On the right side → Click **View Summary**

7. Click **Export** → **PDF**

 This PDF will contain your estimated monthly cost — you can now print or attach it to your lab report.

Final Submission Suggestion

Include:

- Screenshot of VPC setup
 - Screenshot of RDS creation page OR pricing calculator
 - PDF of estimate
 - Estimated cost in ₹ and \$ (if required)
 - Explanation of choices (VPC CIDR, DB instance, edition, etc.)
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Would you like a **PDF letterhead template** you can paste your exported estimate into for your experiment submission?