# ☁️ Microsoft Azure Project – Cloud Computing with Virtual Machine

## 📝 Project Summary

This project demonstrates the use of \*\*Microsoft Azure's cloud computing platform\*\* to set up a virtual machine (VM) environment for practicing and executing SQL queries. The hands-on experience involved provisioning a VM, connecting to it remotely, and using it as a secure workspace for database exploration and querying.

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## 🎯 Objectives

- Understand core concepts of cloud computing using Microsoft Azure

- Provision and configure a virtual machine (Windows/Linux)

- Connect securely to the VM using Remote Desktop Protocol (RDP) or SSH

- Install and run a database management system (e.g., MySQL or SQL Server)

- Practice SQL queries in a cloud-hosted environment

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## 🛠️ Tools & Services Used

- \*\*Microsoft Azure Portal\*\*

- \*\*Azure Virtual Machine (VM)\*\*

- \*\*Remote Desktop Connection / SSH Terminal\*\*

- \*\*SQL Server Management Studio (SSMS)\*\* or MySQL Workbench

- \*\*Windows/Linux OS (depending on configuration)\*\*

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## 📌 Key Activities

- Created and configured a virtual machine on Microsoft Azure

- Ensured network security via firewall rules and NSG settings

- Installed SQL Server and connected to the database engine

- Wrote and tested basic to intermediate SQL queries directly in the VM

- Explored database schemas and used query output for data analysis

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## 📈 Outcome

- Gained hands-on experience with cloud infrastructure and VM provisioning

- Demonstrated understanding of how cloud platforms support database workloads

- Strengthened SQL querying skills in a real-world, cloud-based setup