Day 1 – Create SSH Key Pair for Azure Virtual Machine (Azure)

📅 Challenge
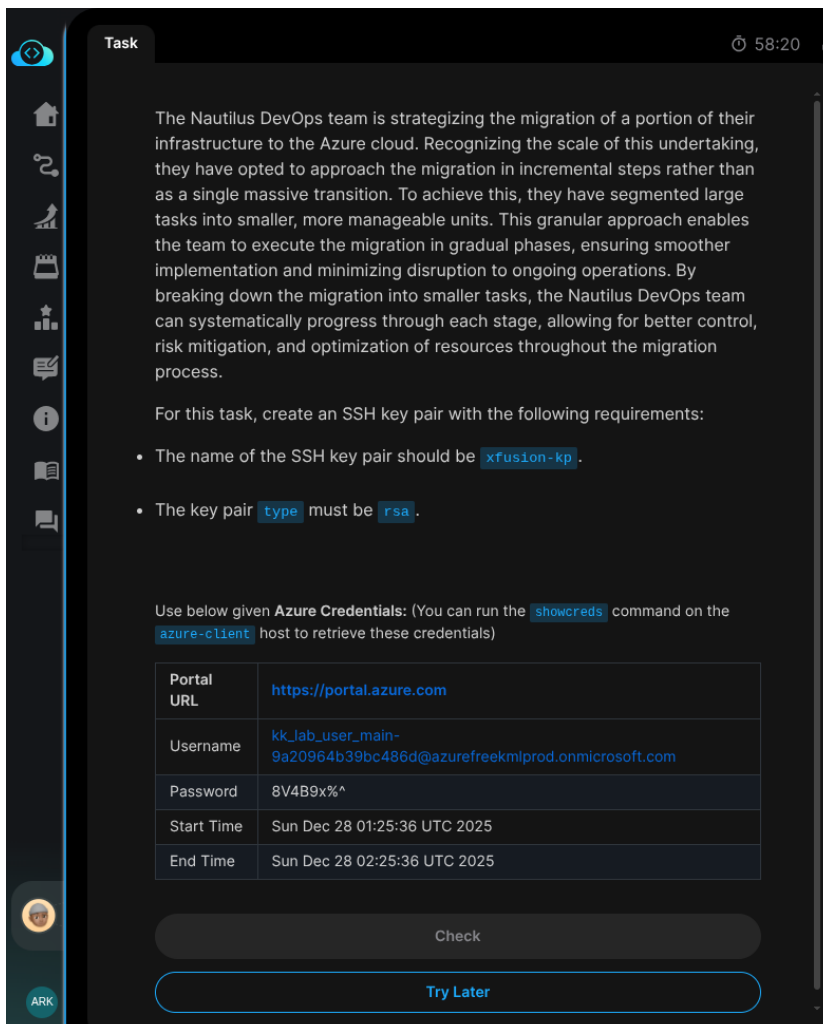
100 Days of Cloud – **Azure Track**
Day 1 – Azure Fundamentals

🎯 Objective

Create an **SSH key pair** in Microsoft Azure that will be used for secure authentication when accessing Azure Virtual Machines.

This task establishes the foundation for secure VM access and validates understanding of Azure identity and resource organization concepts.

📌 Task Requirements

Requirement	Value
SSH Key Name	xfusion-kp
Key Type	RSA
Cloud Platform	Microsoft Azure

Concept Overview

An **SSH key pair** is used in Azure to securely authenticate users to Linux-based virtual machines without using passwords.
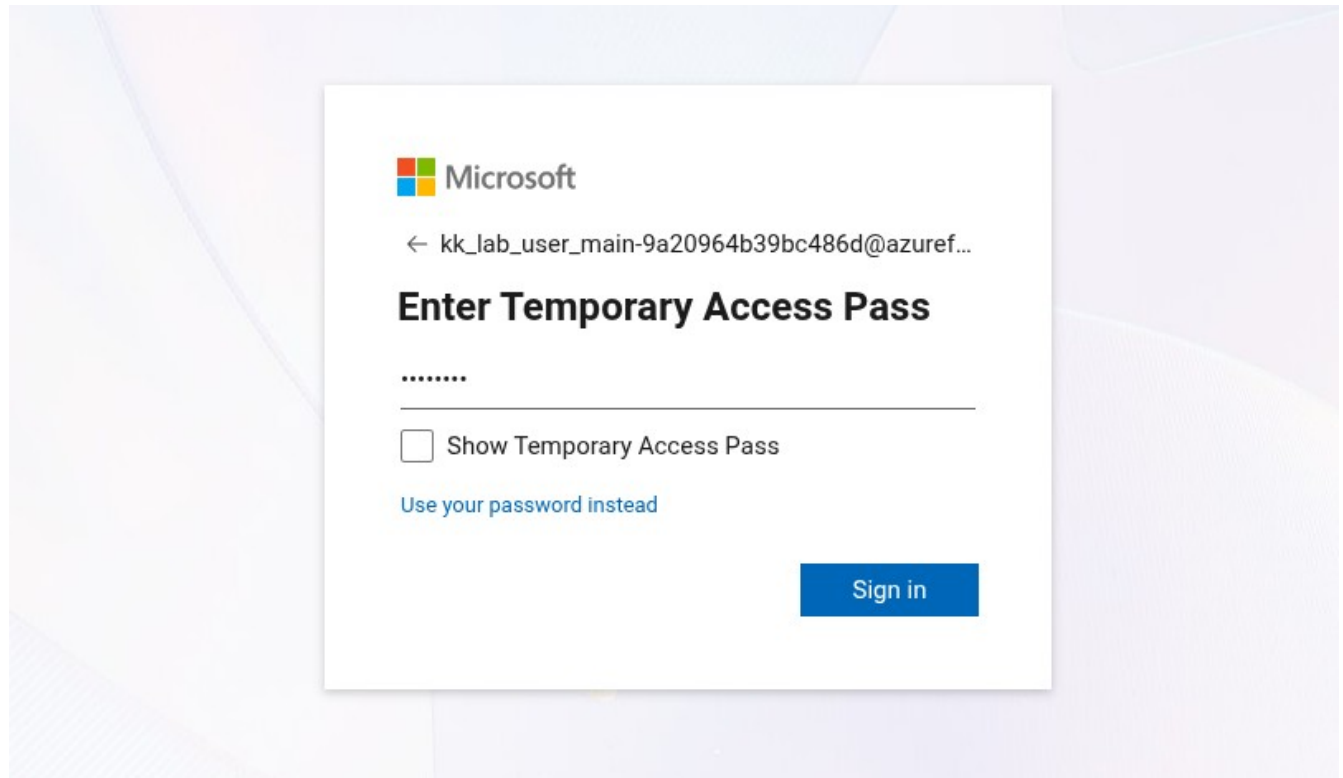
- **Public Key** → Stored in Azure and associated with the VM
- **Private Key** → Downloaded by the user and kept secure

SSH keys improve security and are a best practice for cloud environments.

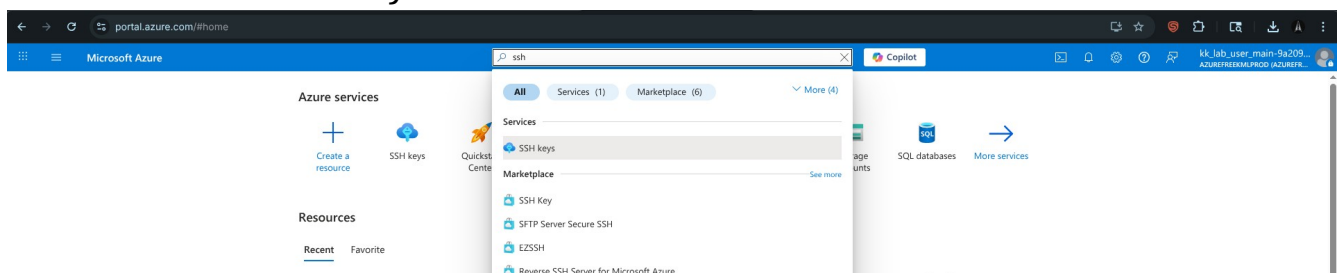## 🛠️ Implementation (Azure Portal)

Step 1: Log in to Azure Portal

- Accessed the Azure Portal using the credentials provided for the lab environment.
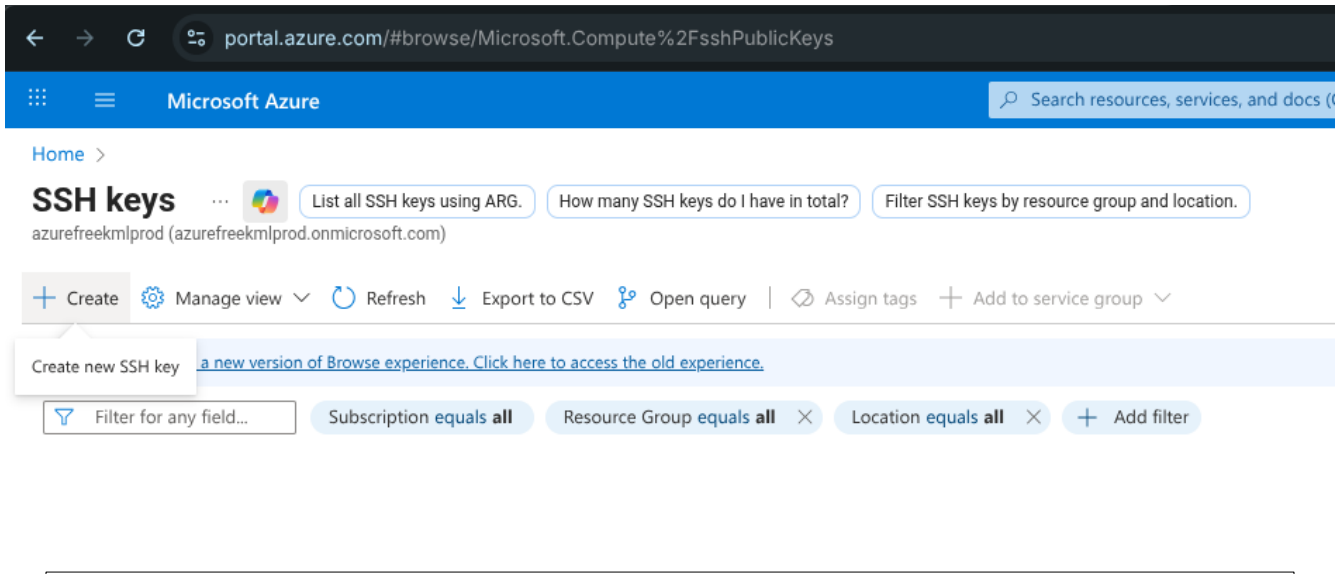
Step 2: Navigate to SSH Keys Service

- Used the Azure Portal search bar
- Searched for **SSH keys**
- Selected **SSH keys** under the Services section

Step 3: Create a New SSH Key Pair

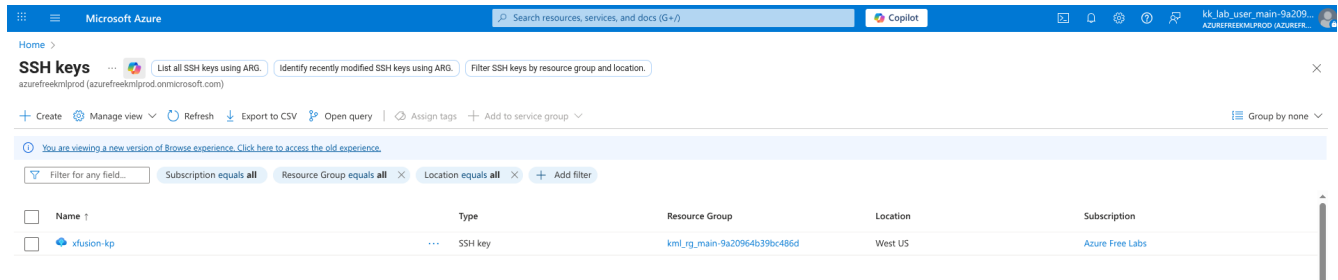- Clicked **Create** to add a new SSH key resource

Step 4: Configure SSH Key Details

Entered the following configuration: - **Subscription:** Selected the active subscription provided for the task - **Resource Group:** Selected an existing resource group to logically organize Azure resources and simplify management - **Key Pair Name:** xfusion-kp - **Key Type:** RSA

Step 5: Review and Create

- Reviewed the configuration
- Clicked **Create** to generate the SSH key pair
- Downloaded the private key securely

✅ Outcome

- Successfully created an RSA-based SSH key pair named xfusion-kp
- SSH key is now available for use when creating or accessing Azure Virtual Machines

📚 Key Takeaways

- SSH keys are the preferred authentication method for Azure Linux VMs
- Proper resource group selection helps with organization and access control
- Secure storage of private keys is critical for cloud security

🎗 Proof of Work

This task demonstrates hands-on experience with: - Azure Portal navigation - Azure SSH key management - Secure VM authentication setup

Screenshots included provide visual verification of real Azure console work.

Next: Day 2 – Create an Azure Virtual Machine