

Introduction to Cloud Computing

LAB 05

Name: Muhammad Yahya

ID: 2280155

BS-SE 7B

Task 1: Create an Azure Key Vault

- Sign in to the Azure portal.

The screenshot shows the Microsoft Azure portal homepage. In the top left, there's a 'Create a resource' button and several service icons: Resource groups, Container Apps, App Services, All resources, Virtual machines, Quickstart Center, Azure AI Foundry, and Kubernetes services. On the right, a user profile for 'bsse2280155@szabist.pk' is displayed with options to 'Sign out', 'My Microsoft account', and 'Switch directory'. Below the services section, there's a 'Resources' section with a 'Recent' tab showing items like 'MyDockerWebApp121', 'ASP-rgwebApp-ba34', 'storageaccount112', 'rg1', 'Azure for Students', and 'NetworkWatcherRG'. A 'See all' link is at the bottom of this list. At the bottom of the page, there's a 'Navigate' bar with links for 'Subscriptions', 'Resource groups', 'All resources', and 'Dashboard'.

From the All services blade, search for and select Key vaults, then select +Add +New +Create.

The screenshot shows the 'Create a key vault' wizard in the Microsoft Azure portal. The 'Basics' step is selected. The 'Subscription' dropdown is set to 'Azure for Students'. The 'Resource group' dropdown shows '(New) rg2' with a 'Create new' link. Under 'Instance details', the 'Key vault name' is 'keyvault432', 'Region' is 'Central India', and 'Pricing tier' is 'Standard'. At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons, along with a 'Give feedback' link.

The screenshot shows the Microsoft Azure Key Vault Overview page for a vault named 'keyvault432'. The left sidebar contains navigation links for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Access policies, Resource visualizer, Events, Objects, Keys, Secrets, Certificates, Settings, Access configuration, Networking, Microsoft Defender for Cloud, and Diagnostic logs. The main content area displays 'Essentials' information: Resource group (rg2), Location (Central India), Subscription (Azure for Students), Subscription ID (db878fcc-8781-42d0-a61d-55de3d976446), Vault URI (https://keyvault432.vault.azure.net/), Sku (Standard), Directory ID (d7e692a5-cccf-417c-b67f-0ded375904c4), Directory Name (Default Directory), Soft-delete (Enabled), and Purge protection (Disabled). Below this, there's a 'Tags (edit)' section with a link to 'Add tags'. A 'Get started' tab is selected, followed by Properties, Monitoring, Tools + SDKs, and Tutorials. The 'Manage keys and secrets used by apps and services' section includes links for Control access to key vault, Enable logging and set up alerts, and Turn on recovery options.

Task 2: Add a secret to the Key Vault

- Under Settings click Secrets, then click + Generate/Import.
- Configure the secret.

The screenshot shows the 'Create a secret' dialog box. It has fields for 'Name' (ExamplePassword) and 'Secret value' (*****). The 'Content type (optional)' field is empty. Under 'Set activation date' and 'Set expiration date', there are two empty input fields. The 'Enabled' section shows a 'Yes' button highlighted in blue. The 'Tags' section shows '0 tags'. At the bottom are 'Create' and 'Cancel' buttons.

- Click Create.

- Once the secret has been successfully created, click on the ExamplePassword, and note it has a status of Enabled
- Select the secret you just created.

The screenshot shows the Microsoft Azure Key Vault interface. On the left, there's a navigation sidebar with options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Access policies, Resource visualizer, Events, Objects (Keys, Secrets, Certificates), Settings, Access configuration, Networking, and Microsoft Defender for Cloud. The 'Secrets' option is currently selected. The main content area displays a table with one row for 'ExamplePassword'. The table columns are Name, Type, Status, and Expiration date. The status is listed as 'Enabled' with a checkmark icon. A message at the top of the table says, 'The secret 'ExamplePassword' has been successfully created.'

Name	Type	Status	Expiration date
ExamplePassword		✓ Enabled	

- Click the button Show Secret Value, to display the password you specified earlier.

This screenshot shows the detailed view of the 'ExamplePassword' secret. It includes sections for Properties (Created: 11/4/2025, 6:16:17 PM; Updated: 11/4/2025, 6:16:17 PM), Secret Identifier (a URL), Settings (checkboxes for activation and expiration dates, both unchecked), and Enabled (radio buttons set to 'Yes'). Below these are sections for Tags (0 tags) and Secret (Content type (optional) field). At the bottom, there's a 'Hide Secret Value' button and a text input field containing the secret value 'hvFkk96'.