Problem
VM ke child module banate wakt humne subnet id ko hardcode kia...
Subnet ID nikalne ke lie portal me login karna pada, Vitual network me jana pdega, JSON view se lana pda.. jo ki already pehle bana hua tha...

Solution
Jo pehle se bana hua resource hai uski kuch bhi details nikalne ho toh data block ka use karte hain..
NIC ke andar me subnet_id pass karna hai, vo uthane ke lie, data block use karenge.
Data block dhhondhne ke lie, terrafrom registry pr jaenge, waha pr subnet ka data block dhhondhenge..

Azure Key Vault

What is Key Vault?
Key vault ek aisa storage ki jagah hai jo bahut secure hai aur usme hum secret , certificate aur keys rakh sakte hai.. ye ek PAAS service hai..

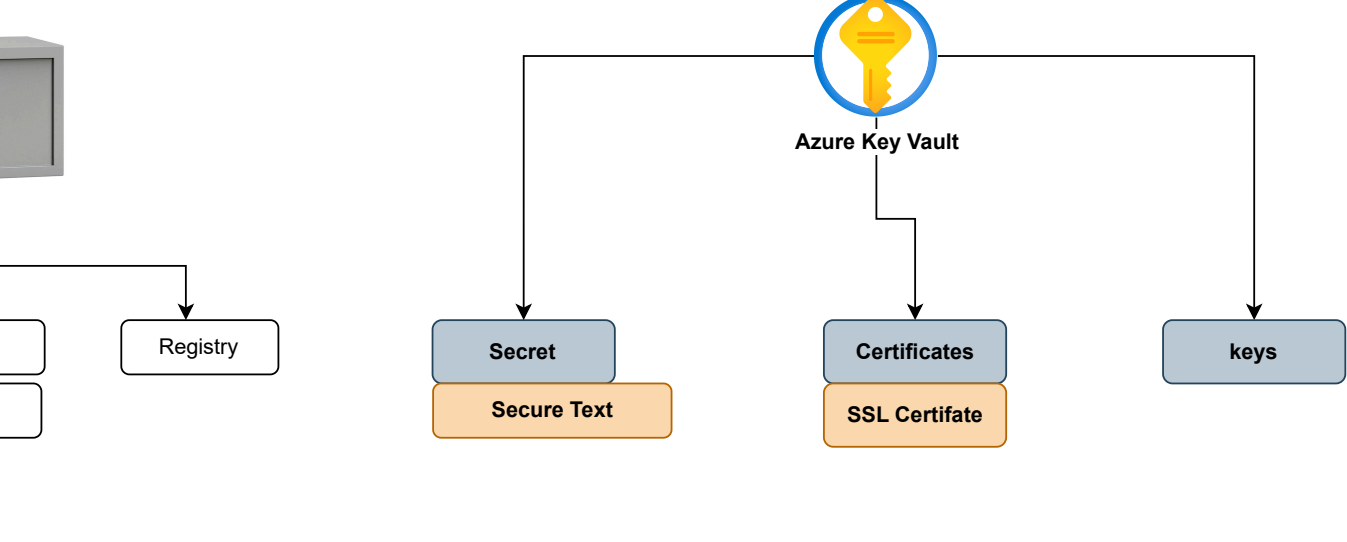| How to create Key Vault?	
Manual	Automation = Terraform, CLI

How to create secrets in Key Vault manual and automation?
How to give access to key vault? Number of ways
What is secret rotation policy?
How to restore key if deleted?
How to retrieve the secrets from Key vault and use for VM Password?

Sona Chandi	Cash	Registry

Kho Kho 1st Price Certificate

Azure Key Vault

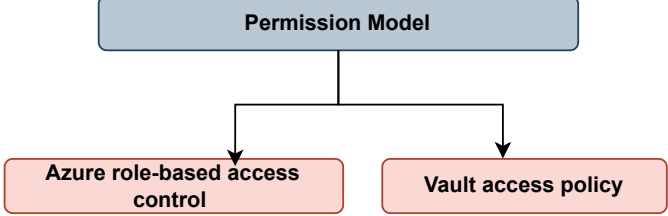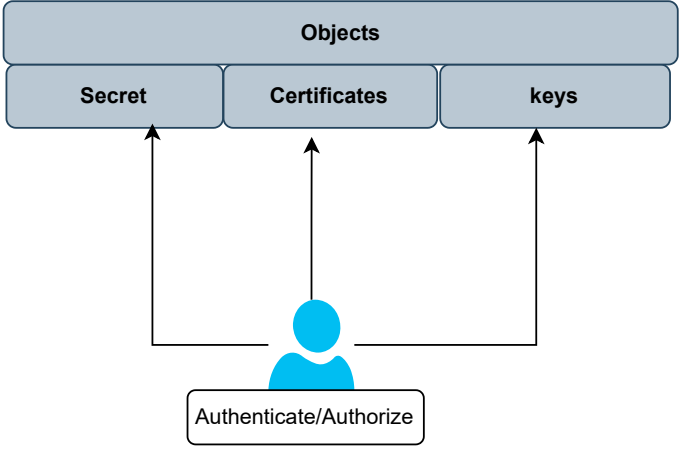| Secret	Certificates	keys
Secure Text	SSL Certifate	

This feature allows you to recover for the duration of the retention period.
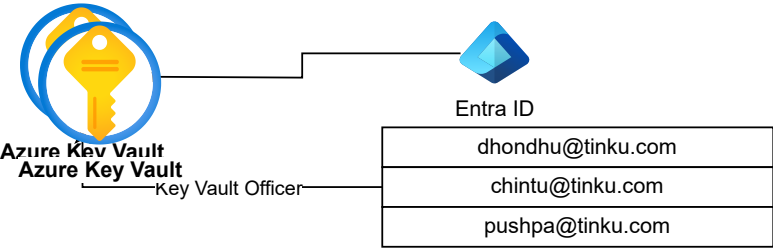
Soft delete area
Retention Area

Azure Key Vault

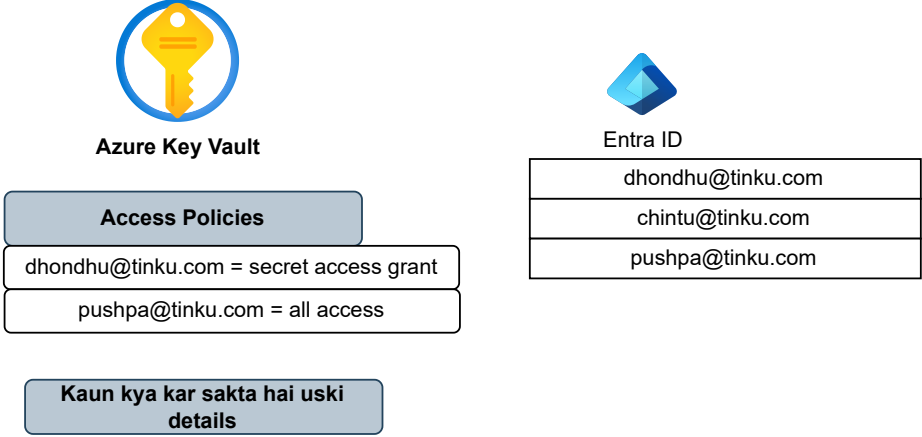| purge_protection = disable |
| --- |

Objects		
Secret	Certificates	keys

Authenticate/Authorize

Permission Model

Azure role-based access control	Vault access policy

Azure role-based access control

Azure Key Vault
Azure Key Vault
Key Vault Officer

Entra ID

dhondhu@tinku.com
chintu@tinku.com
pushpa@tinku.com

Vault access policy

Azure Key Vault

Entra ID

dhondhu@tinku.com
chintu@tinku.com
pushpa@tinku.com

Access Policies
dhondhu@tinku.com = secret access grant
pushpa@tinku.com = all access

Kaun kya kar sakta hai uski details

VM ka password hum log plain text me code me dal rahe the, ye dalna paap hai... kyuki agar galti koi securtiy team ne dekh lia toh pure devops ka band baja dega..
Isko rakhne ke lie humne key vault banaya, Key vault banane ke lie azure portal pr detail dali aur bana dia..
1. Key vault banaya (Banane pr keys, certificates, and secrets ki jagah bani)
2. Humne VM ka password secret me store kia(password banane ke pehle User ko role assign kia key vault admin ka)
3. vm-password(key) = P@ssw01rd@123(value)
4. Keyvault ka dala block lake lgaya
5. Secret ka data block lagaya

Azure Key Vault

key vault administrator

Entra ID

info@devopsinsiders.com
chintu@tinku.com
pushpa@tinku.com

Objects

Key	Certifcate
	ssl.cert

VM Child Module
main.tf

```
resource "azurerm_linux_virtual_machine" "vm" {
```

Secret
vm-username = devopsadmin
vm-password = P@ssw01rd@123

```
admin_username        = var.admin_username
admin_password        = var.admin_password
```

Data Block
data block = Key Vault Fetch
data block = vm-username
data block = vm-password