**Scenario 2: You need to set up virtual network peering between two VNets to enable resource sharing. Outline the steps to configure VNet peering without transit peering.**

In this scenario, We are creating a peering connection between two VNets that allows them to communicate directly with each other. Transit peering is not involved, meaning that traffic will not be forwarded between the VNets through a third network (such as a hub VNet).

We need to follow these steps:

1. Prepare the VNets
2. Create Peering from VNet1 to VNet2
3. Create Peering from VNet2 to VNet1
4. Verify Peering Configuration

Steps to Configure VNet Peering

1. Prepare the VNets

* Ensure that each VNet has a unique address space: The address spaces of the two VNets should not overlap.
* Create VNets (if not already created):
* Go to the Azure portal.
* Navigate to "Virtual networks" and click "Add".
* Provide the necessary details (name, address space, resource group, and region) and create the VNets.

1. Create Peering from VNet1 to VNet2

* Navigate to VNet1:
* In the Azure portal, go to "Virtual networks" and select the first VNet (VNet1).
* Add a Peering Connection:
* Go to the "Peerings" section in VNet1 and click "Add".
* Enter a name for the peering connection (e.g., "VNet1-to-VNet2").
* For the "Peering link name" (on VNet1 side), enter a name (e.g., "VNet1-to-VNet2").
* Select the second VNet (VNet2) in the "Peering link name" field for VNet2's side of the peering connection.
* Configure the peering settings:
  + Allow Virtual Network Access: Enable this to allow communication between the VNets.
  + Allow Forwarded Traffic: This option is not needed for basic peering, so leave it disabled.
  + Allow Gateway Transit: Leave this disabled if you are not using a gateway.
  + Use Remote Gateways: Leave this disabled if VNet2 does not use VNet1’s gateway.
  + Click "Add" to create the peering connection.

1. Create Peering from VNet2 to VNet1

* Navigate to VNet2:
  + In the Azure portal, go to "Virtual networks" and select the second VNet (VNet2).
* Add a Peering Connection:
  + Go to the "Peerings" section in VNet2 and click "Add".
  + Enter a name for the peering connection (e.g., "VNet2-to-VNet1").
  + For the "Peering link name" (on VNet2 side), enter a name (e.g., "VNet2-to-VNet1").
  + Select the first VNet (VNet1) in the "Peering link name" field for VNet1's side of the peering connection.
  + Configure the peering settings:
    - Allow Virtual Network Access: Enable this to allow communication between the VNets.
    - **Allow Forwarded Traffic**: This option is not needed for basic peering, so leave it disabled.
    - **Allow Gateway Transit**: Leave this disabled if you are not using a gateway.
    - **Use Remote Gateways**: Leave this disabled if VNet1 does not use VNet2’s gateway.
  + Click "Add" to create the peering connection.

1. Verify Peering Configuration
   1. Check Peering Status:
      1. Ensure that the peering connections are in a "Connected" state on both VNets.
      2. Navigate to the "Peerings" section in each VNet and verify the status.
   2. Test Connectivity:
      1. Deploy virtual machines (VMs) in both VNets.
      2. Test connectivity between the VMs in different VNets using tools like ping or telnet.
      3. Ensure that the VMs can communicate with each other as expected.

**Important Notes**

* **No Transit Peering**: Since transit peering is not configured, the VNets will only be able to communicate directly with each other. They cannot use each other’s gateways or forward traffic through each other.
* **Security Rules**: Ensure that Network Security Groups (NSGs) or other security configurations on the subnets of each VNet allow traffic from the IP ranges of the peered VNet.