Set up cy Configure a LAN using a
Switch cy Ethernet cables in your Lab.

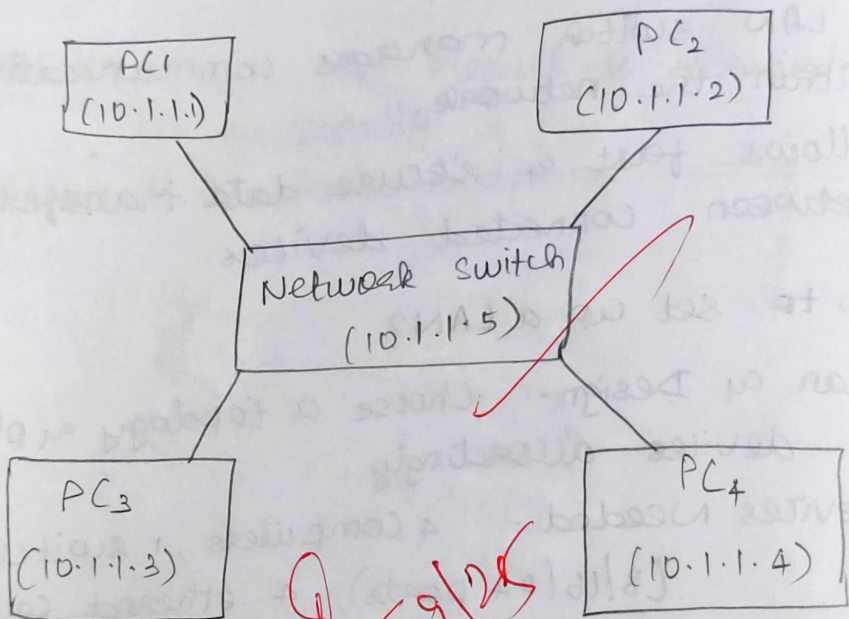**AIM:** Set up cy configure a LAN using a switch cy ethernet cables in your lab.

what is LAN?

* LAN (Local Area Network) connects devices within a limited area (home, office or school).

* Enables sharing of resources like files, printers cy internet access.

* Connects devices such as computers, printers, servers cy switches.

* A LAN switch manages communication within the network.

* Allows fast cy secure data transfer between connected devices.

How to set up a LAN?

* Plan cy Design - Choose a topology cy place devices accordingly.

* Devices Needed - 4 Computers, 1 switch (8/16/24 ports), 4 ethernet cables.

* Connect Devices - plug each computer into the switch using ethernet cables.

* Assign IP addresses :
    PC1 : 10.1.1.1 /255.00.0
    PC2 : 10.1.1.2/255.0.0.0
    PC3 : 10.1.1.3/255.0.0.0
    PC4 : 10.1.1.4/255.0.0.0

* Configure switch - Log in via web interface
assign IP : 10.1.1.5 / 255.0.0.0

* Test connectivity - Use ping command bt
PC's & switch.

* File sharing - share a folder

* Access shared files - other PCs on the
LAN can open the shared
folder.

LAN configuration Diagram.

```
    ┌──────────┐                 ┌──────────┐
    │   PC1    │                 │   PC2    │
    │ (10.1.1.1)│                │(10.1.1.2)│
    └─────┬────┘                 └────┬─────┘
          │        ┌──────────────┐   │
          └────────│Network switch│───┘
          ┌────────│  (10.1.1.5)  │───┐
          │        └──────────────┘   │
    ┌─────┴────┐                 ┌────┴─────┐
    │   PC3    │                 │   PC4    │
    │(10.1.1.3)│                 │(10.1.1.4)│
    └──────────┘                 └──────────┘
```

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RESULT: Thus the set up & config . of
LAN using switch & ethernet is
done.