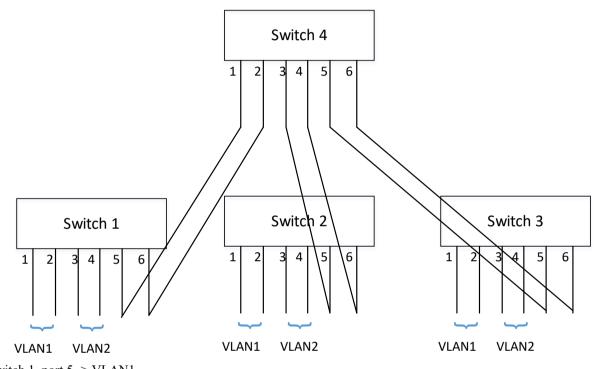
## City University of Hong Kong Department of Electrical Engineering

## **EE3009 Data Communications and Networking**

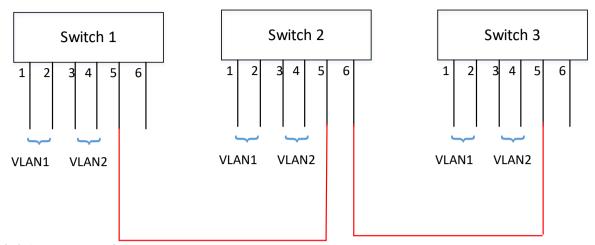
## **Solution to Tutorial 3**

1. When port-based VLAN is used, the switches are connected as follows:



```
switch 1, port 5 -> VLAN1
switch 1, port 6 -> VLAN2
switch 2, port 5 -> VLAN1
switch 2, port 6 -> VLAN2
switch 3, port 5 -> VLAN1
switch 3, port 6 -> VLAN2
switch 4, port 1, port 3, port 5 -> VLAN1
switch 4, port 2, port 4, port 6 -> VLAN2
```

With VLAN trunking, switch 4 is not needed, and the switches are connected as follows:



Switch 1, port 5 -> trunk port

Switch 3, port 5 -> trunk port Switch 2, port 5 and port 6 -> trunk port