**Title of practical:** Compare and contrast various network devices

**Theory:**

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| **Device name** | | **Description** | | | | **Layer** | |
| Hub | | | Hubs cannot filter data so data packets are sent to all connected devices/computers. The device has to make decision if it needs the packet. | | Physical | |
| Bridge | | | Bridges are used to separate parts of a network that do not need to communicate regularly, but need to be connected. | | Data-link | |
| Switch | | | A switch when compared to bridge has multiple ports. Switches are very efficient by not forwarding packets that errored out or forwarding good packets selectively to correct devices only. Switches can support both layer 2 (based on MAC Address) | | Data-link | |
| Router | | | A router uses the IP address to forward packets. This allows the network to go across different protocols. Routers forward packets based on software | | Network | |
| Gateway | | | The gateway (or default gateway) is implemented at the boundary of a network to manage all the data communication that is routed internally or externally from that network. | | All | |
| Repeater | | | A repeater is a network device that retransmits a received signal with more power | | Physical | |
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