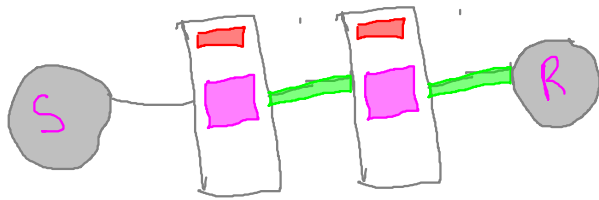


Packet switching

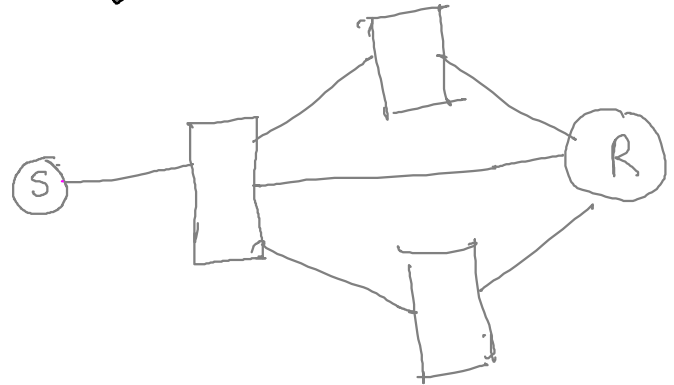
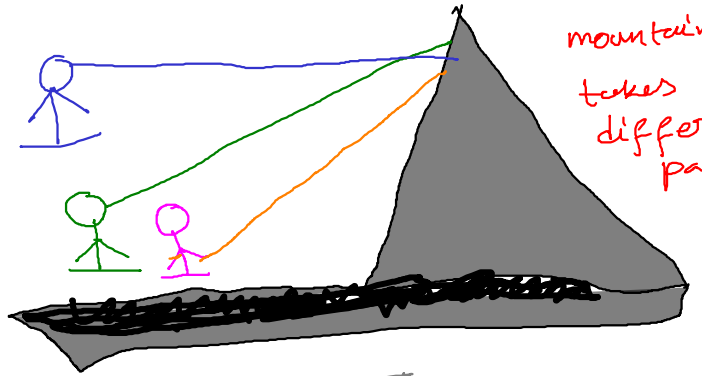
Virtual Circuits

Amateur mountaineers follows the guide & path of mountain-guide



Datagram

every mountaineer takes different path



In VC, if there is multiple packets then the packets follows the same path which first packets take & so that this path does not cause any problem to package transferring the buffer is reserved to hold the packet, the CPU is reserved for immediately re-transmit the packet from the hop and the bandwidth is also reserved so that transmission is faster

Unlike VC, In DG nothing is reserved, here every packet can choose different path and when a packet gets transmitted, it is in their luck if they can find buffer, CPU & Bandwidth available → If these doesn't available then the packet gets discarded

1) Buffer, CPU & Bandwidth is reserved

2) Rest of the packets follow first packet in the same path \rightarrow so the packets are in-order

3) b/c the resources are reserved \rightarrow no packets are discarded.

so VC is very reliable

4) In phone-call we use VC.

Here our n/w provider already reserved buffer, CPU & Bandwidth that's why they charge us as time \rightarrow we pay for the resources/time that are reserved for us.

Same reason is for jio - jio is free b/c jio has reserved resources and jio customers are connected with same resources so they can give it as a offer but they can't give it with other n/w as to reach other n/w we need resources of other n/w which is not reserved

1) Not reserved

2) No packets follow the path of another packet so the packets are out of order

3) packets may get discarded if they can't find available buffer, CPU & Bandwidth.

So, they are not very reliable.

4) In internet data DG is used \rightarrow There is nothing reserved we pay as per our data is processed or stored or transmitted with available Bandwidth

VoIP is an app where we can call with data so they convert call to data with VOIP technology.

by jio. Same reason for STD calls
are pricey b/c to reach far-away
calls we need more resources
of other n/w

Costly

Not costly