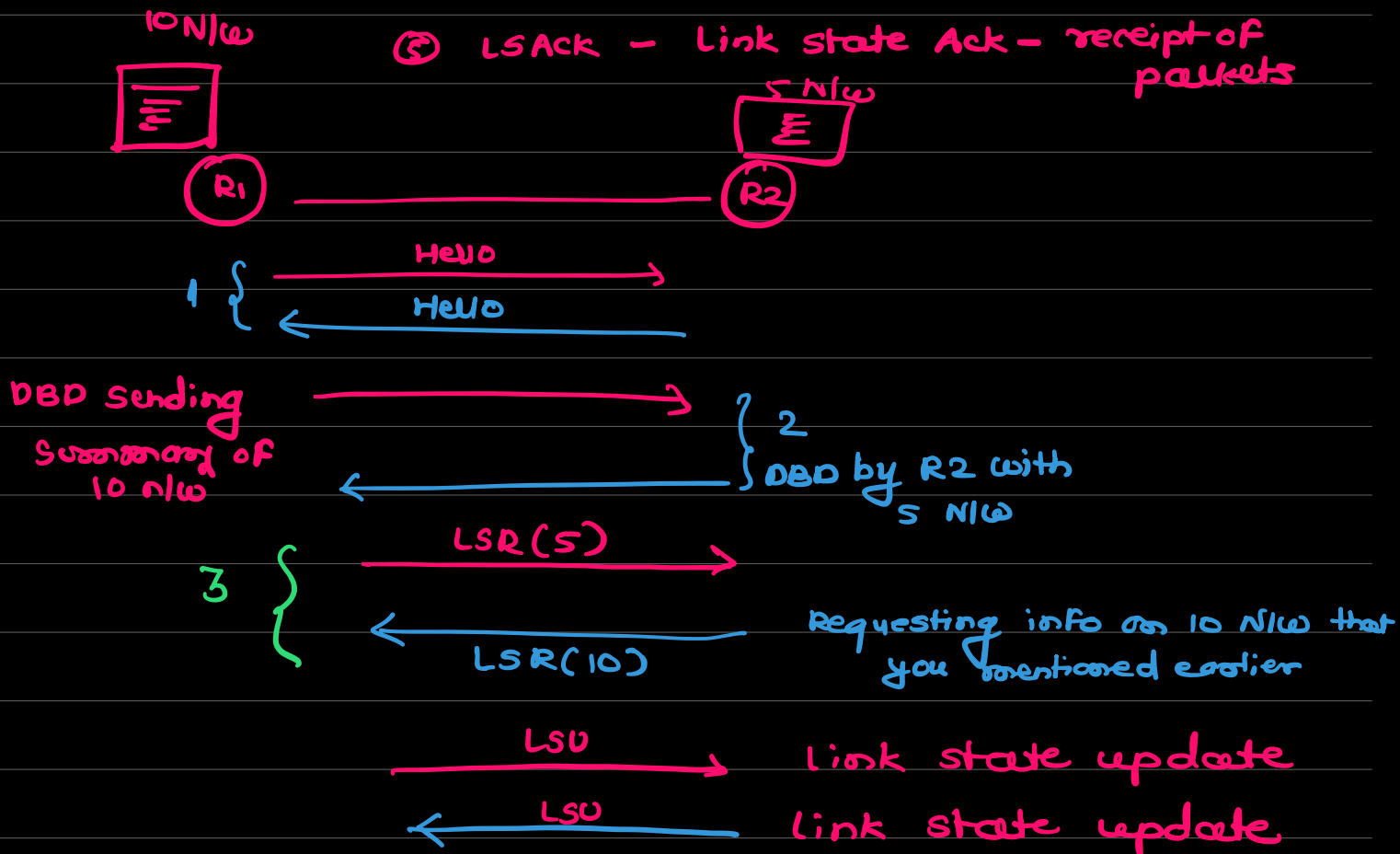# ospf types of packets

① Hello — Hello timer is 10 sec
② DBD — summary of packets
③ LSR — Link state request
④ LSU — Link state update
⑤ LSACK — Link state Ack — receipt of packets

10 N/w

S N/w

R1 ——————————— R2

1 {
Hello →
← Hello

DBD sending summary of 10 n/w →
2 {
← DBD by R2 with S N/w

3 {
LSR(5) →
← LSR(10)
Requesting info on 10 N/w that you mentioned earlier

LSU → Link state update
← LSU Link state update.

LSR — So one we send the DBD summary then R1 will say okay you have S N/w as you said so can you please send me that networks for me to modify into my table that is done by LSR

②   OSPF uses two multicast address

224.0.0.5 → for all

224.0.0.6 → DR/BDR uses this to

send info with other routers

224.0.0.6 - Used when one link of any ospf router goes
down it sends the multicast msg to routers in that case
brother & BDR will just discard the msgs and only DR will
acknowledge that this is done through 224.0.0.6

neighbourship vs adjencies

→ When both routers exchange the Hello packets
they are in neighbour state

○ When they are in full state they are in
adjency

○ DR/BDR election happens in two-way state

④ Every lan segment or prefixes will have
DR/BDR selection.

⑤ if packets are comming from different area
on ospf in that case on routing table
it will show as OIA → OSPF inter area.

if from same area then it will be <u>0</u>

⑥ We have different areas in ospf to
  — ① Prevent LSA flooding
  ② manage ospf from centralized locⁿ

⑦   differents LSA's in ospf

  ① Router LSA — No. of routers in area = router LSA
  ② NetworkLSA — No. of DR in area
  ③ Summary LSA —
  ④
  ⑤

Config in OSPF

get   show ip route

- and based on that table create a routing path

router ospf 1
network ip wildcard area 0

show ip ospf neighbour
show ip ospf database
show ip route ospf

To see the neighbour → # show cdp neighbour

show ip protocols