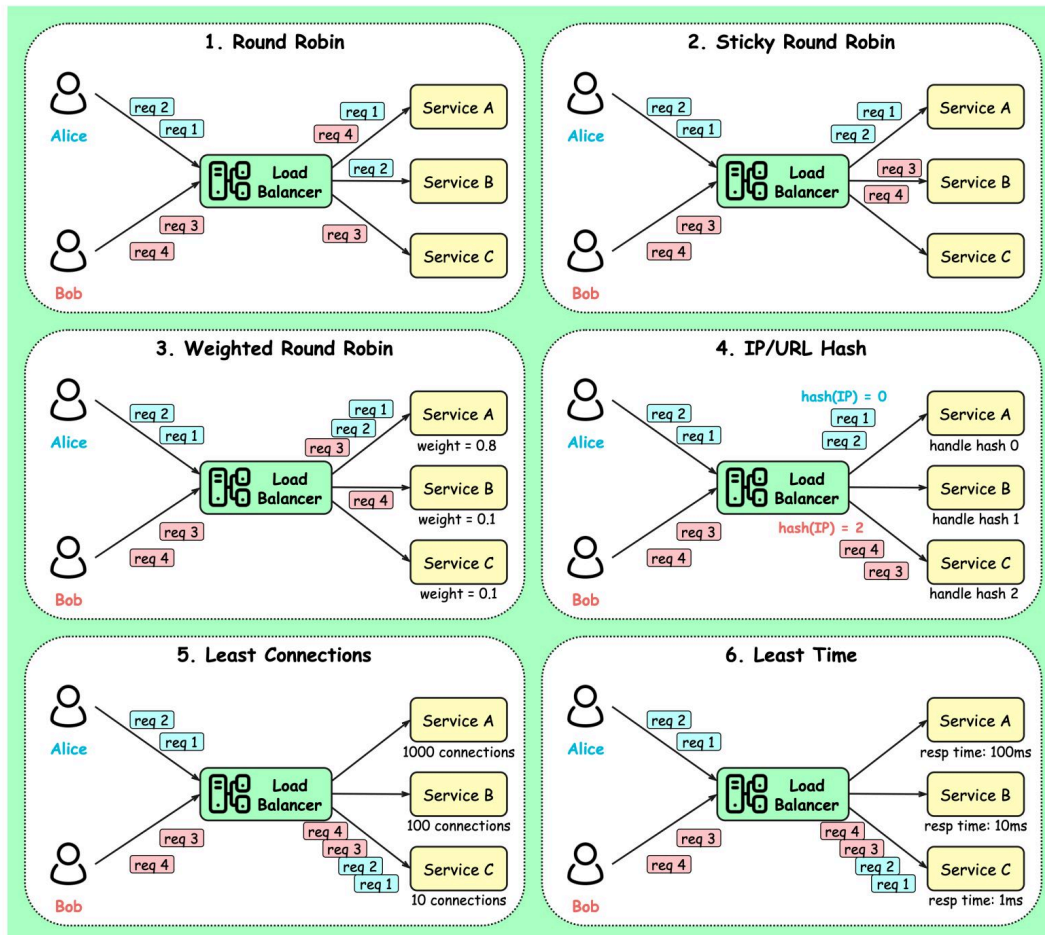# Top 6 Load Balancing Algorithms

Load Balancing Algorithms

Static Algorithms

1. Round robin
   The client requests are sent to different service instances in sequential order. The services are usually required to be stateless.

2. Sticky round-robin
   This is an improvement of the round-robin algorithm. If Alice's first request goes to service A, the following requests go to service A as well.

3. Weighted round-robin
   The admin can specify the weight for each service. The ones with a higher weight handle more requests than others.

4. Hash
   This algorithm applies a hash function on the incoming requests' IP or URL. The requests are routed to relevant instances based on the hash function result.

Dynamic Algorithms

5. Least connections
   A new request is sent to the service instance with the least concurrent connections.

6. Least response time
   A new request is sent to the service instance with the fastest response time.