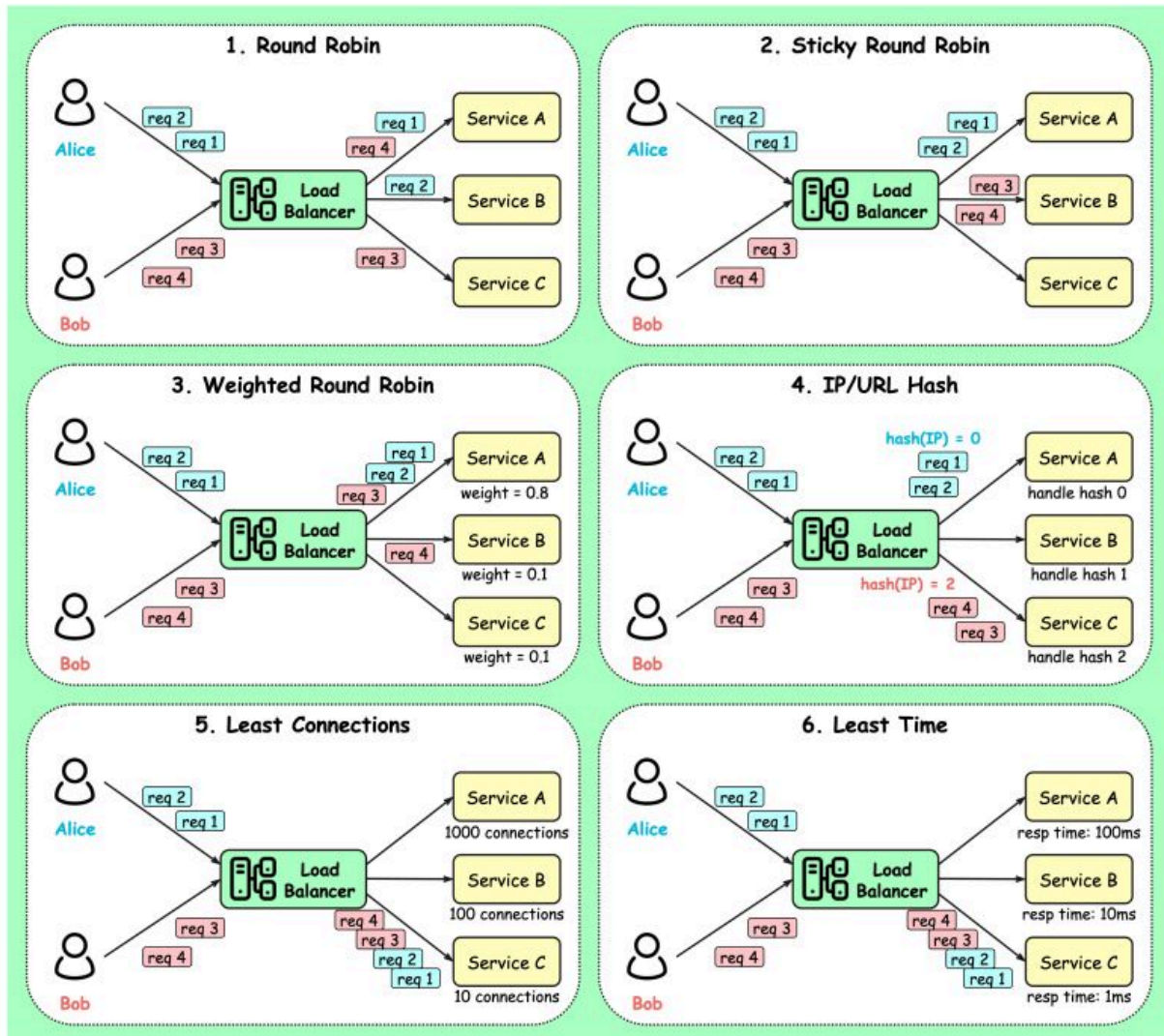


What are the common load-balancing algorithms?

The diagram below shows 6 common algorithms.

## Load Balancing Algorithms

 [blog.bytebytego.com](https://blog.bytebytego.com)



- 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.

Over to you:

1. Which algorithm is most popular?
2. We can use other attributes for hashing algorithms. For example, HTTP header, request type, client type, etc. What attributes have you used?