Part 4:

One approach to solve API Gateway single point of failure problem is to implement redundancy. You can deploy multiple API gateways in different ports/regions/zones to ensure that if one gateway fails, traffic can be automatically routed to another gateway. This can be used to minimize downtime and ensure that your APIs remain available. You can also use load balancer Infront of multiple API getaways to distribute traffic evenly across the getaways.

Part 5:

A service registry is a centralized directory of all the microservices in an architecture. By using a service registry, you can keep track of which microservices are running and how they relate to each other. This can help you to visualize and understand the overall architecture of the system. And Distributed tracing is a technique for monitoring and debugging distributed systems. It involves adding unique. identifiers to each request as it flows through the system, so that you can track the flow of requests across different microservices. This can help you to understand how different microservices are working together to process a particular business process.