Part 4: Solving Service Downtime Issues

- **Circuit Breaker Pattern:** Use a circuit breaker to prevent repeated calls to a down service and provide fallback responses.
- **Service Caching:** Cache the last successful response to provide continuity if the service goes down.
- **Retry Mechanism:** Implement retries to handle transient failures.
- **Load Balancing:** Deploy multiple instances of the service behind a load balancer for failover.
- **Graceful Degradation:** Allow services to operate with reduced functionality when dependencies are down.