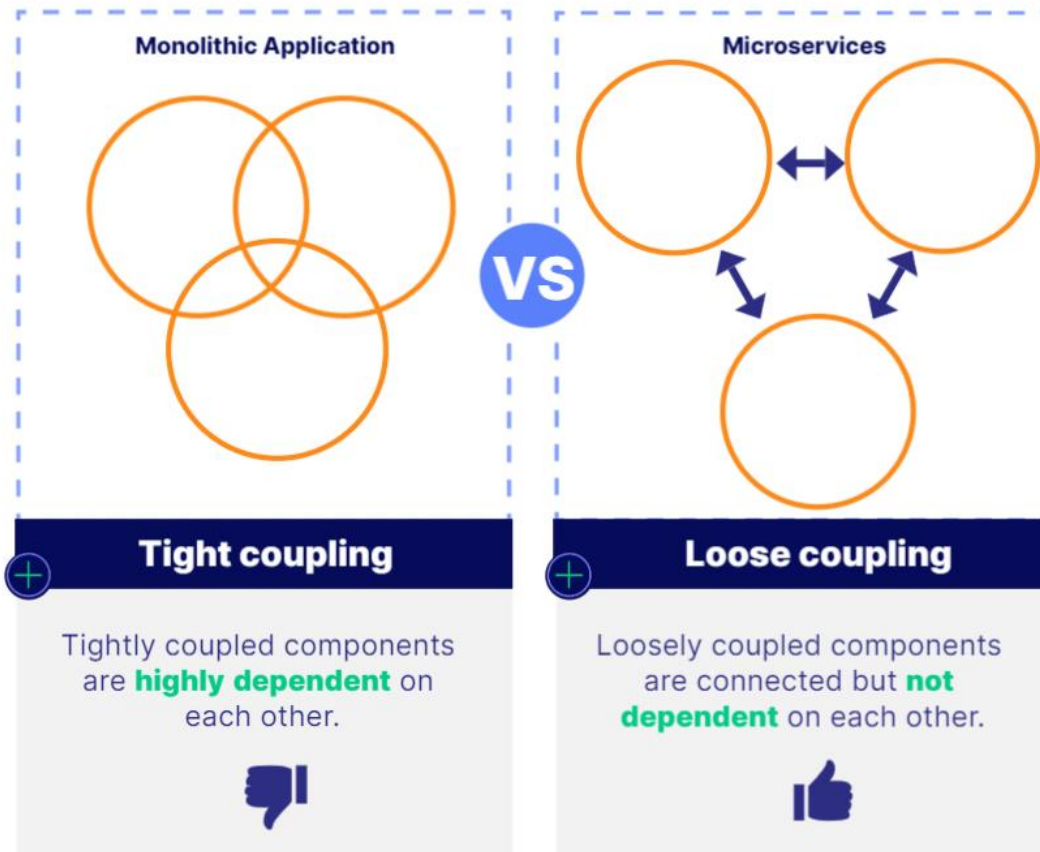Messaging and Logging Services:

Have you heard of loose coupling?

Coupling defines the interdependencies or connections between components of a system. **Loose coupling** helps reduce the risk of cascading failures between components.

Monolithic Application

VS

Microservices

Tight coupling

Tightly coupled components are **highly dependent** on each other.

👎

Loose coupling

Loosely coupled components are connected but **not dependent** on each other.

👍

Simple Queue Service (SQS)

SQS is a message queuing service that allows you to build loosely coupled systems.

Allows component-to-component communication using messages

Multiple components (or producers) can add messages to the queue

Messages are processed in an asynchronous manner

SQS

Things to Remember When Studying for the Exam

☑ **SQS**
Don't forget messages in queues are processed in FIFO order.

☑ **SQS**
Remember that message queues support loose coupling.

Simple Notification Service (SNS)

SNS allows you to send emails and text messages from your applications.

Send email and text messages +

Publish messages to a topic +

+ Subscribers receive messages

SNS

Email

Text Message

Simple Email Service (SES)

SES is an email service that allows you to send richly formatted HTML emails from your applications.

Ideal choice for marketing campaigns or professional emails

Unlike SNS, SES sends HTML emails

SES

Things to Remember When
Studying for the Exam

☐ **SNS**

Don't forget SNS sends text
messages and plain text emails.

☐ **SES**

Remember that SES sends HTML-formatted
emails for marketing campaigns.