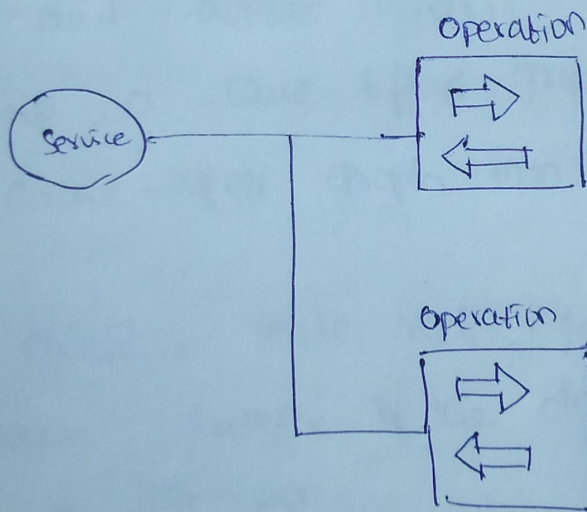


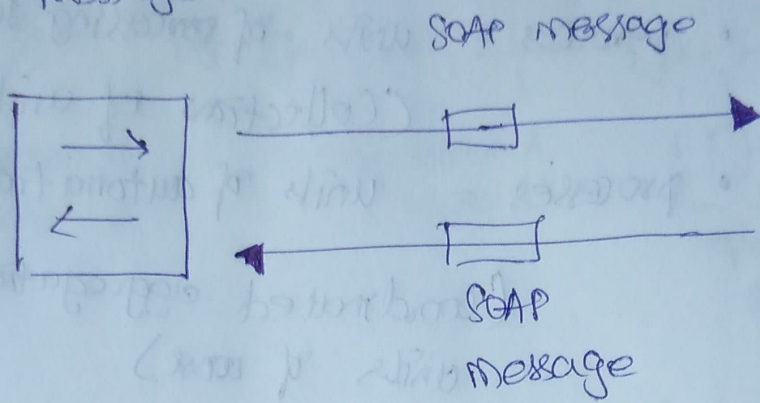
Anatomy of a SOA

This framework can be applied to implement services in just about any environment. To understand SOA, we need to abstract the key components of the web services framework and study their relationships more closely.

Logical components of the web service framework :-

Each operation governs the processing of a specific function the web service is capable of performing. The processing consists of sending and receiving SOAP messages.

An operation processing outgoing and incoming SOAP messages



### Logical Components of automation Logic :-

The web service framework provides us not only with technology base for enabling connectivity, it also establishes a modularised perspective of how automation logic, as a whole, can be comprised of independent units. To illustrate the inherent modularity of web services, let's abstract the following fundamental parts of the framework.

- SOAP messages
- Web Service Operations
- Web Services
- Activities

By relating each to different sized unit of logic, as follows:

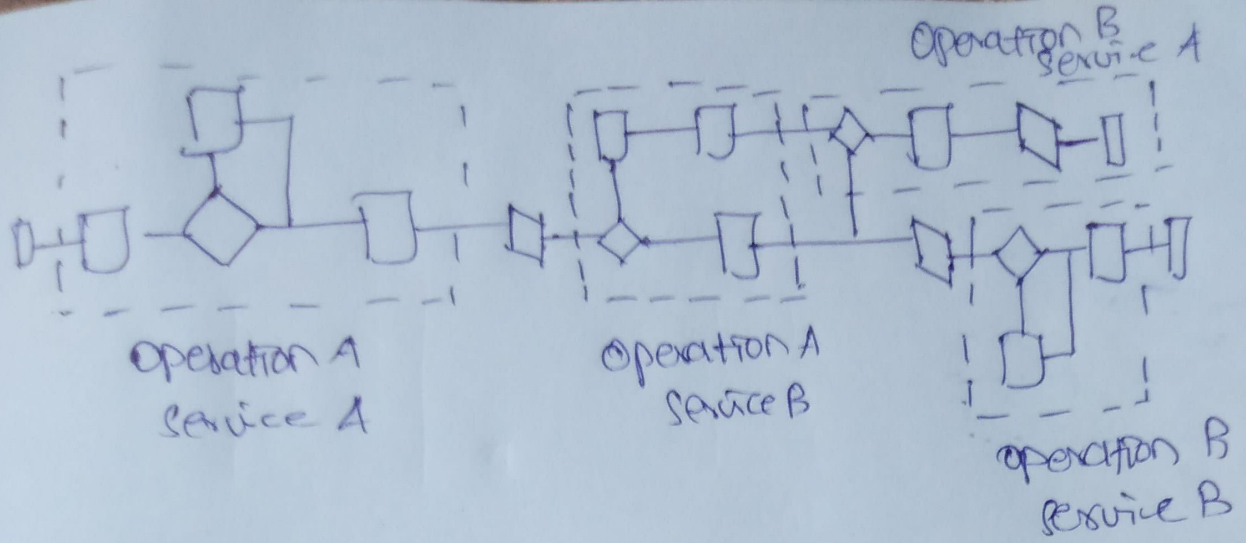


- messages = units of communication.
- operations = units of work.
- services = units of processing logic  
(Collections of units of work)
- processes = units of automation logic  
(Coordinated aggregation of units of work)

### Components of SOA :-

Each of the previously defined components establishes a level of enterprise logic abstraction, as follows:

- A message represents the data required to complete some or all parts of a unit of work.
- An operation represents the logic required to process messages in order to complete a unit of work.
- A service represents a logically grouped set of operations capable of performing related units of work.
- A process contains the business rules that determine which service operations are used to complete a unit of automation.



How components of SOA are inter-related :-

- An operation sends and receives messages to perform work.
- An operation is therefore mostly defined by the messages it processes.
- A service groups a collection of related operations.
- A service is therefore mostly defined by the operations that comprise it.
- A process instance can compose services.