SOAP	REST
1. SOAP is a protocol through which two computer communicates by sharing the XML document.	**1.** Rest is a service architecture and design for network-based software architecture.
3. SOAP does not support caching.	**3.** It supports caching.
4. SOAP is like a custom desktop application, closely connected to the server.	**4.** A REST client is just like a browser and uses standard methods. An application has to fit inside it.
5. SOAP is slower than the REST.	**5.** It is faster than SOAP REST is generally faster and uses less bandwidth. It's also easier to integrate with existing websites with no need to refactor site infrastructure. This enables developers to work faster rather than spend time rewriting a site from scratch. Instead, they can simply add additional functionality.
SOAP API used Web Services Description language for describing the functionalities being offered by web services	REST API uses Web Application Description Language,
6. It runs on HTTP but envelopes the message. The WSDL document is what tells the client of all the operations that can be performed by the web service	6. It uses the HTTP headers to hold meta information.
7. exposes components of application logic as services rather than data	7. you're exposing a public API over the Internet.
SOAP is that it offers built-in retry logic to compensate for failed communications.	REST, on the other hand, doesn't have a built-in messaging system. If a communication fails, the client has to deal with it by retrying. There's also no standard set of rules for REST.
SOAP stands for Simple Object Access Protocol.	**REST stands for REpresentational State Transfer.**
SOAP can't use REST because it is a protocol	REST can use SOAP web services because it is a concept and can use any protocol like HTTP, SOAP.

SOAP is a protocol. was designed with a specification. It includes a WSDL file which has the required information on what the web service does in addition to the location of the web service.	REST is an architectural style. a web service can only be treated as a RESTful service if it follows the constraints of being Client Server Stateless Cacheable Layered System Uniform Interface
SOAP **uses services interfaces to expose the business logic**.	REST **uses URI to expose business logic**.
JAX-WS is the java API for SOAP web services.	**JAX-RS** is the java API for RESTful web services.
SOAP defines standards to be strictly followed. SOAP tends to be better-suited for. For instance, if you need more **robust security**, SOAP's support for WS- Security can come in handy.	REST does not define too much standards like SOAP.
SOAP **requires more bandwidth** and resource than REST.	REST **requires less bandwidth** and resource than SOAP
SOAP permits XML data format only.	REST permits different data format such as Plain text, HTML, XML, JSON etc.
SOAP defines its own Robust security. Comprehensive features in the way of security,transactions, and ACID (Atomicity,Consistency, Isolation,Durability) compliance.	RESTful web services inherits security measures from the underlying transport