RECAP:What is an API? - Application Programming InterfaceWhat is a web service?- it is an also an API that is accessible over the webWhat is 3 tier client-server architecture?Presentation layer -\*(API/Web service is here)\*- application layer(logic/code) - database layer(data layer)What is JSON? JavaScript Object Notation  
is file standard format that is readable by humans and machines that translate and transmit dataIs JSON a programming language? No it is not{  
    “key” : “value”,  
    “key” : “value”}What is CRUD?  
Create  
Retrieve  
Update  
DeleteWhat are some HTTP methods?POST - creating data  
GET - retrieving data  
PUT - updating a complete record  
PATCH - partially updating a record  
DELETE - deleting dataWhat do I need if I want to make a POST call?  
1. URI  
what is a URI?  
URI = Base URL/Domain URL + resource/endpoint/web service URL  
2. Headers  
Content-Type - what type of request are you making? What format are you sending your request in?  
Authorization - JWT using keyword ‘Bearer’  
3. Payload/body - information we are sending in JSON formatWhat do I need if I want to make a GET call?  
1. URI  
2. Headers  
No payload - we are just retrieving dataWhat do I need if I want to make a PUT call?  
1. URI  
2. Headers  
3. Payload  
What do I need if I want to make a PATCH call?  
1. URI  
2. Header  
3. Payload - only send partial payloadWhat do I need if I want to make a DELETE call?  
1. URI  
2. Headers  
3. We may or may not need a payload  
If we dont need a payload, what can we assume?  
we may have to add parameters to the URI2 tier client-server architecture?what are cookies? - a more formal way of calling them is HTTP cookiesJSON Web Token AKA JWT “JUT”JWT is used for Authorization NOT AuthenticationWhen we log in to an application, if our credentials are correct then we will be authenticated. When this happens, our credentials are stored in the servers memory, and our credentials are stored in a cookie that our computer will use while we are on the application which will have a Session IDSo everytime we make a request(meaning we click on a different tab/page within the application) the cookie will be sent to the server, then the server will check the server memory and will see if the cookie information matches, remember the cookie has a session ID which has our credentials that we used to log in - this is how the server knows its us (if this information was not stored in the server memory we would have to keep logging in)With JWT - simple. Nothing is stored in server memory instead the server will provide us with a JWT which means we were authenticated and with every request we make we need to send the JWT with it, this is the only way the server will be able to know its usOAuth 2.0 Framework -----------------------------OAuth - Open Authorizationin OAuth 2.0 there are 4 different grant types  
1. Authorization Code Grant Type - JWT  
2.Implicit grants  
3.password grants  
4.Client credentials grantsTask 1: Explain cookies and how authentication/authorization works in a same session - explain what happens if your information was not stored in the servers memoryTask 2: Explain how JWT worksTask 3: Explain the OAuth 2.0 framework