1. What are various ways to add images into our app? Explain with code examples.

* The HTML <img> tag is used to embed an image in a web page.
* The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.
* CDN, external files, url
* To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property
* The HTML <picture> element allows you to display different pictures for different devices or screen sizes.

1. What would happen if we do console.log(useState())?

* It returns an array with two values: 1. Undefined and 2. Function

1. How will useEffect behave if we don’t add a dependency array?

* If there is no dependency array, then the useeffect code will run after every render cycle.

1. What is SPA?

* An SPA (Single-page application) is a web app implementation that loads only a single web document, and then updates the body content of that single document via JavaScript APIs such as [XMLHttpRequest](https://developer.mozilla.org/en-US/docs/Web/API/XMLHttpRequest) and [Fetch](https://developer.mozilla.org/en-US/docs/Web/API/Fetch_API) when different content is to be shown.
* This therefore allows users to use websites without loading whole new pages from the server, which can result in performance gains and a more dynamic experience, with some tradeoff disadvantages such as SEO, more effort required to maintain state, implement navigation, and do meaningful performance monitoring.

1. What is difference between Client Side Routing and Server Side Routing?

* Server Side Routing -
  + When browsing, the adjustment of a URL can make a lot of things happen.
  + This will happen regularly by clicking on a link, which in turn will request a new page from the server.
  + This is what we call a server-side route. A whole new document is served to the user.
  + A server-side request causes the whole page to refresh.
  + This is because a new GET request is sent to the server which responds with a new document, completely discarding the old page altogether.
  + Pros –
    - A server-side route will only request the data that’s needed. No more, no less.
    - Because server-side routing has been the standard for a long time, search engines are optimized for webpages that come from the server.
  + Cons –
    - Every request results in a full-page refresh. That means that unnecessary data is being requested.
    - A header and a footer of a webpage often stays the same. This isn’t something you would want to request from the server again.
    - It can take a while for the page to be rendered. However, this is only the case when the document to be rendered is very large or when you have slow internet speed.
* Client Side Routing –
  + A client-side route happens when the route is handled internally by the JavaScript that is loaded on the page.
  + When a user clicks on a link, the URL changes but the request to the server is prevented. The adjustment to the URL will result in a changed state of the application.
  + The changed state will ultimately result in a different view of the webpage.
  + This could be the rendering of a new component, or even a request to a server for some data that the application will turn into some HTML elements
  + It is important to note that the whole page won’t refresh when using client-side routing. There are just some elements inside the application that will change.
  + Pros –
    - Because less data is processed, routing between views is generally faster.
    - Smooth transitions and animations between views are easier to implement.
  + Cons –
    - The whole website or web-application needs to be loaded on the first request. That’s why the initial loading time usually takes longer.
    - Because the whole website or web-application is loaded initially, there is a possibility that there is data downloaded for views you won’t even come across.
    - It requires more setup work or even a library. Because server-side is the standard, extra code must be written to make client-side routing possible.
    - Search engine crawling is less optimised. Google is making good progress on crawling single-paged-apps, but it isn’t nearly as efficient as server-side routed websites.