THRISHAPRIYA SELVARAJ
thrishapriyaselvaraj@gmail.com

Conceptual Question:

1. What are the differences between == and === in JavaScript?

   Ans. The basic difference between "==" and "===" in JavaScript is "==" is a loose equality check, while "===" is a strict equality check. The main difference is that "==" will try to convert the values to the same type before comparing, while "===" checks both value and type without conversion. For example, 5 == '5' is true, but 5 === '5' is false.

2. What is the purpose of React's useEffect hook? Provide an example use case.

   Ans. useEffect lets you perform side effects in your components. It's like basically telling React, "Hey, after you update the screen, run this code." A common use case is fetching data from an API when a component loads. A classic example can be, you might use it to load a user's profile information when they visit their account page.

3. How does Node.js handle asynchronous operations, and why is this beneficial?

   Ans. Node.js handles asynchronous operations using an "event loop." This means it can start a task (for eg, reading a file) and then move on to other tasks while waiting for the first one to finish. This is important because it allows Node.js to handle many operations at once without getting stuck waiting for the slower tasks to complete.

4. What is the difference between getStaticProps and getServerSideProps in Next.js?

   Ans. getStaticProps prepares data for a page at build time. It's like baking a cake in advance. getServerSideProps prepares data for a page on each request. It's like taking a food order and then cooking. We use getStaticProps for content that doesn't change often, and getServerSideProps for content that needs to be fresh every time.

5. What is a primary key in PostgreSQL, and why is it important?

   Ans. A primary key is basically a special column (or group of columns) in a table that uniquely identifies each row. It's crucial because it ensures each record is unique and provides a fast way to look up specific rows. It's like a student ID number in a school database.

6. Describe the steps to deploy a simple Node.js application to Azure App Services.

   Ans. Steps:
   - Firstly, create an Azure account and set up App Service
   - Then prepare your Node.js app for deployment
   - Then use Azure CLI or Azure portal to create a deployment
   - Configure your deployment settings
   - Finally, push your code to Azure

- Lastly, Monitor the deployment and test your app

7. What is a common benefit of using Azure App Services for hosting applications?

   Ans. One common benefit I can think of is easy scaling. Azure App Services can automatically adjust resources based on traffic, so your app can handle sudden spikes in usage without you needing to manually manage servers.

8. What is the difference between a WordPress post and a page?

   Ans. WordPress posts are typically used for timely content like blog entries or news updates. They're usually displayed in reverse chronological order and can be categorized or tagged. Pages, on the other hand, are for static, timeless content like an "About Us" or "Contact" page. They don't usually appear in the blog feed and often show up in the main navigation menu.