Q1 WRITE 5 DIFFERENCES BETWEEN REACT.JS ANGULAR.JS &VUE.JS?

- ANSWER **Two-way data binding:** Angular replicates changes made to the model instantly into the views in an easy, efficient, and intuitive way.
- **Popular and well-used:** Angular has a lot of traction in the field, with many communities and professionals supporting it

- **Heavier applications:** Due to the many features of this framework, sometimes they can create a burden for your projects, all translating into a heavier application and slower performance compared to React or Vue.
-
- **Constantly updating:** New, significant changes are introduced often. This can cause problems for developers when it comes to adapting to them.
-
- **Steep learning curve:** With its many facets and features, this framework is definitely harder to learn than its counterparts.
- **REACT**

- **One-way data binding:** Data will flow only in one direction when writing our React applications, providing us with better control over the full project.
- **Easily testable:** It's very easy with React to test our components and monitor the output of our actions, making the whole development process better.

- **Doesn't implement MVC:** This means you'll sometimes need to use extra libraries to implement state and model.
- **Poor documentation:** Due to the constant updates made to this tool, plus all the companion libraries being created to support it, React technologies are accelerating so fast that there is no time to write proper instructions.
- **Always changing:** As mentioned above, React constantly changes, and developers must regularly get up to date with the new ways to do things. Everything is evolving, and sometimes you might find yourself not in a comfortable position with keeping up with such a pace.

VUE.JS

- **Overall performance:** With its manageable size and the ability to incrementally adopt parts of its technology, performance covers a large part of what makes Vue a great tool.
- **Ease of use:** Contrary to other frameworks like Angular, Vue is easy to learn, which makes it appealing for both beginners and longtime professionals.
- **Great documentation:** The team behind Vue has put a lot of effort into the tool's documentation, which is incredibly helpful for users..
- **Easy project integration:** This allows you to start using Vue instantly in your project

- **Small community:** Being a new framework, Vue still needs time to grow its community to the size of those backing React or Angular.
- **Smaller job market:** Similarly to what we said above, since it's a relatively

Q2 WRITE 5 SIMILARITIES BETWEEN ANGULAR.JS ,VUE.JS&REACT.JS?

ANSWER. Even with tons of great JavaScript frameworks emerging in the past decade, Angular, React, and Vue still remain some of the most popular. In this article, I'm going to concentrate my attention specifically on their performance to help you understand how this comes into play when choosing the tool you will be working with.

- **DOM manipulation:** This helps us determine which frameworks perform better for highly dynamic applications that require a lot of interaction with the DOM.
- **Startup time:** This will give us an idea of which frameworks are more suitable when you need a faster initial load time, useful for applications that require more speed.
- **Memory allocation:** This reveals which frameworks better operate with the memory — for example, performing bulk operations such as reading or writing thousands of records from the database.

Every color you will see in the images has a specific meaning:

- A greener color means that given framework performs better than another one.
- The red/yellow color means that the given framework performs worse.
- The Virtual DOM model is very helpful in terms of performance. Both React and Vue have a Virtual DOM. Due to a well-built structure, Vue delivers great performance and memory allocation. React, on the other side, works well and Angular is already ahead in the competition.

- The performance depends on various factors. These three frameworks are comparatively faster than other JavaScript frameworks. You should not take performance into account to draw the conclusion because it mainly relies on the size of the application and optimization of code.

- Native apps are built for a specific platform. React has React Native, using which you can develop native apps for iOS and Android. Angular's NativeScript is already embraced by many to develop native apps, and the Ionic framework is widely popular for crafting hybrid apps.

- Vue's Weex platform is evolving and, currently, there seems to be no plan to take it further, making it a full-fledged cross-development platform.

Q3 WHAT IS SCSS?

SCSS (Sassy CSS) which is the most commonly used syntax for CSS was derived from SASS (Syntactically Awesome Style Sheets). SCSS is a special type of file for SASS, a program written in Ruby that assembles CSS style sheets for a browser. SCSS is like CSS with better formatting.

SCSS also supports the use of custom functions which accept parameters and are used to prevent unused repetitions.These functions are known as mixins..We can also inherit the properties of one selector into other selector by making use of extension.SCSS allows us to do math using operators. We can perform simple calculations inside our code for better output

Q4 DIFFERENCE BETWEEN FRAMEWORK AND LIBRARY?

The technical difference between a framework and library lies in a term called inversion of control. When you use a library, you are in charge of the flow of the application. You are choosing when and where to call the library. When you use a framework, the framework is in charge of the flow.

Q5 WHICH HTML5 TAG IS USED FOR ADDING AUDIO TO THE WEBPAGE?

The **HTML** <**audio**> **element is used** to embed **sound** content in documents. It may contain one or more **audio** sources, represented using the src attribute or the <source> **element**: the browser will choose the most suitable one. It can also be the destination for streamed media, using a MediaStream .

Q6 WHICH HTML5 TAG IS USED FOR ADDING VIDEO TO THE WEBPAGE?

The **HTML** <**video**> **element is used** to **embed video** in **web** documents. It may contain one or more **video** sources, represented using the src attribute or the source **element**. The <**video**> **element** is supported by all modern browsers.

Q7 WHAT IS HTML5 CANVAS?

The canvas element is part of HTML5 and allows for dynamic, scriptable rendering of 2D shapes and bitmap images. It is a low level, procedural model that updates a bitmap and does not have a built-in scene graph, but through WebGL it allows 3D shapes and images to be displayed

Q8 MENTION 6 ANIMATION PROPERTIES EXIST IN CSS3

- @keyframes
- animation-name
- animation-duration
- animation-delay
- animation-iteration-count
- animation-direction
- animation-timing-function
- animation-fill-mode
- animation

Q9 HOW TO INTEGRATE FONT AWESOME BUTTONS IN HTML5 ? WRITE THE CODE FOR IT?

EASY: Default CSS
1. Copy the **font-awesome** directory into your project.
2. In the <head> of your **html**, reference the location to your **font-awesome**. min. css. ...

3. Check out the examples to start using **Font Awesome**!