1. What is JavaScript?

JavaScript is one of the most popular and used programming languages in the world. It is a lightweight, interpreted, open, and cross-platform programming language. JavaScript is a complete object-based scripting language produced by Netscape for use within HTML documents and enables interactions with web pages in various unique ways.

1. Why Should learn Java Script

**Universal Web Language**: JavaScript is the core language of the web. Almost all modern websites use JavaScript to create interactive and dynamic user experiences. Knowing JavaScript is essential for front-end development.

**Full-Stack Development**: JavaScript is unique in its ability to be used for both client-side (front-end) and server-side (back-end) development, thanks to environments like Node.js. This makes it a versatile language for full-stack development.

**High Demand in the Job Market**: JavaScript skills are in high demand in the tech industry. Proficiency in JavaScript opens up many career opportunities in web development, mobile app development, and beyond.

**Rich Ecosystem and Frameworks**: JavaScript has a vast ecosystem with powerful libraries and frameworks (like React, Angular, Vue.js, Node.js), which are widely used in the industry for building scalable and efficient applications.

**Active Community and Resources**: There is a large and active community of JavaScript developers, which means abundant resources, forums, tutorials, and support are available for learning and troubleshooting.

**Enhances Front-End Interactivity**: JavaScript is key to making websites interactive and user-friendly. It allows developers to create rich interfaces with features like drag-and-drop, animations, and real-time updates.

**Compatibility with Web Technologies**: JavaScript works seamlessly with HTML and CSS, the other two pillars of web development, allowing for the creation of complex web applications.

**Rapid Development and Prototyping**: JavaScript’s flexibility and the availability of numerous libraries and frameworks enable rapid development and prototyping, which is crucial for startup environments and agile development.

**Continuously Evolving**: JavaScript is an evolving language with constant updates and new frameworks, keeping it relevant and innovative for modern web development needs.

**Versatile and Accessible**: JavaScript can be used for various applications beyond web development, like desktop and mobile app development, game development, and even IoT (Internet of Things).