ASSIGNMENT-4 & 5

4. Do some changes and observe

a. Give some wrong file name while import and observe the messages in console window

➢ Wrong file name doesn't provide a message in console window.

b. Is Filename case sensitive check practically?

➢ Filename : Is not Case-sensitive

5. What are the key differences between Java and JavaScript?

➢ Here are some differences between Java and JavaScript:

- o **Type:**
  Java is a compiled language, while JavaScript is an interpreted language. This means that Java code is converted to machine code before it is executed, while JavaScript code is interpreted line by line.

- o **Platform:**
  Java is a cross-platform language, while JavaScript is a client-side language. This means that Java code can run on any platform that has a Java Virtual Machine (JVM), while JavaScript code can only run in a web browser.

- o **Purpose:**
  Java is primarily used for developing applications, while JavaScript is primarily used for developing web pages.

- o **Syntax:**
  Java has a more complex syntax than JavaScript. This is because Java is a class-based language, while JavaScript is a prototype-based language.

- ○ **Scope:**

Java is a statically typed language, while JavaScript is a dynamically typed language. This means that the types of variables and expressions must be declared in Java, while they can be inferred from the context in JavaScript.

- ○ **Memory management:**

Java uses automatic memory management, while JavaScript uses manual memory management. This means that Java garbage collector automatically deallocates memory that is no longer being used, while JavaScript developers must explicitly deallocate memory that is no longer being used.

SUMMARY:

Java	JavaScript
Code must be compiled	The code is all text
Slightly more complex	Easier in comparison
Used to perform complex tasks	Complex tasks cannot be executed

Overall, Java is a more powerful and versatile language than JavaScript, but it is also more complex and difficult to learn. JavaScript is a simpler language that is easier to learn, but it is not as powerful or versatile as Java.