

JavaScript -

JavaScript is a lightweight interpreted (or just-in-time JIT compiled) programming language with first-class functions.

- Just In Time:

JIT or dynamic translation or run time compilation, is compilation during execution of a program (or runtime) rather than before execution.

- Compilation:

Compilation is the process of translating code written in one language, also known as source language, to another language (target language).

A compiler translates programs codes from high-level (human readable) languages to ~~one~~ a low-level (machine-readable or machine code) language to create an executable program.

- First-class functions:

A programming language is said to have first-class functions when functions in that language are treated like any other variable.

A first-class function can be passed as an argument to other functions, can be returned by another function and can be assigned as a value to a variable.

```
const greet = () => {  
  console.log("hello");  
};
```

```
greet(); // invoking  
// hello
```

JavaScript is a prototype-based, multi-paradigm, single-threaded, dynamic language, supporting object-oriented, imperative, and declarative (eg. functional programming) styles.