Lecture 02

**Q1: What will be the order of execution between setImmediate(callback) and setTimeout(callback, 0)?**

A1: setImmediate() and setTimeout() are similar, but behave in different ways depending on when they are called. setImmediate() is designed to execute a script once the current poll phase completes. setTimeout() schedules a script to be run after a minimum threshold in ms has elapsed.

The order in which the timers are executed will vary depending on the context in which they are called. If both are called from within the main module, then timing will be bound by the performance of the process (which can be impacted by other applications running on the machine).

However, if you move the two calls within an I/O cycle, the immediate callback is always executed first:

The main advantage to using setImmediate() over setTimeout() is setImmediate()will always be executed before any timers if scheduled within an I/O cycle, independently of how many timers are present.

Q2: Explain the difference between **process.nextTick** and **setImmediate**? What will be the execution order?

A2: process.nextTick() fires immediately on the same phase. setImmediate() fires on the following iteration or 'tick' of the event loop. process.nextTick is execute before setImmediate

**Q3. Name 10 core modules that Node provides by default.**

http, url, querystring, path, fs, util, buffer, crypto, domain, events