1) What are microtasks? What is a microtask queue? What is their role in Promises and how are they different from callbacks?

Microtask queue is similar to callback queue but it has a higher priority than callback queue. Functions that are pushed into the microtask queue are executed first and then the callback queue functions are executed.

Microtask queue involves callback functions coming from promises and mutation observer. Suppose if everything in callstack is executed and now, we have two callback functions waiting to be executed in the microtask queue and callback queue then the event loop will push the callback function waiting in the microtask queue first.

Explain with examples how private, protected variables can be implemented in classes and how can they be used in subclasses?

class Employee {

#sal = "13LPA";

get salary() {

return "Salary: " + this.#sal;

}

set salary(val) {

this.#sal = val;

}

}

class Subclass extends Employee {}

let obj = new Subclass();

console.log(obj.salary);