Let’s Upgrade Javascript Essential

Assignment(Day 1):

Q1.

METHODS IN CONSOLE FUNCTION:

- log()
- error()
- warn()
- clear()
- time() and timeEnd()
- table()
- count()
- group() and groupEnd()

console.log()

Mainly used to log(print) the output to the console. We can put any type inside the log(), be it a string, array, object, boolean etc.

console.error()

Used to log error message to the console. Useful in testing of code. By default the error message will be highlighted with red color.

console.warn()

Used to log warning message to the console. By default the warning message will be highlighted with yellow color.

console.clear()

Used to clear the console. The console will be cleared, in case of Chrome a simple overlayed text will be printed like : ‘Console was cleared’ while in firefox no message is returned.

console.time() and console.timeEnd()
Whenever we want to know the amount of time spend by a block or a function, we can make use of the time() and timeEnd() methods provided by the javascript console object. They take a label which must be same, and the code inside can be anything(function, object, simple console).

console.table()
This method allows us to generate a table inside a console. The input must be an array or an object which will be shown as a table.

console.count(): This method is used to count the number that the function hit by this counting method.

console.group() and console.groupEnd()

group() and groupEnd() methods of the console object allows us to group contents in a separate block, which will be indented. Just like the time() and the timeEnd() they also accepts label, again of same value.

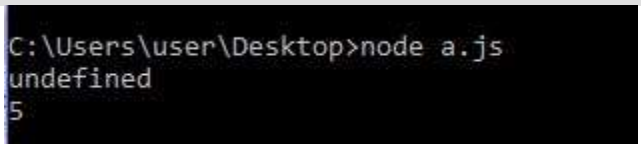
Question NO 2.

Ans :

var and let are both used for variable declaration in javascript but the difference between them is that var is function scoped and let is block scoped.
It can be said that a variable declared with var is defined throughout the program as compared to let.

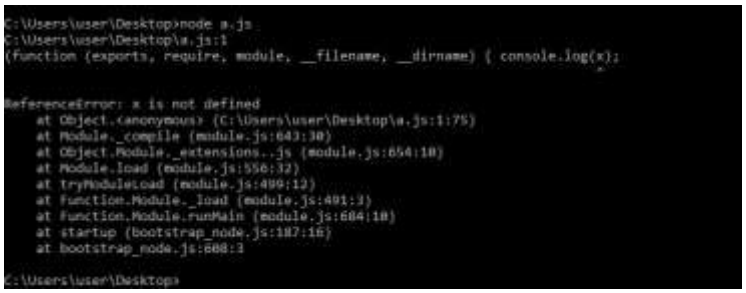
Example of var:

```
Input:
console.log(x);
var x=5;
console.log(x);
Output:
undefined
5
```



Example of let:

```
Input:
console.log(x);
let x=5;
console.log(x);
Output:
Error
```



QUESTION NO 3.

Data types in JavaScript:

There are majorly two types of languages.

First, one is **Statically typed language** where each variable and expression type is already known at compile time. Once a variable is declared to be of a certain data type, it cannot hold values of other data types. Example: C, C++, Java.

Other, **Dynamically typed languages**: These languages can receive different data types over time. For example- Ruby, Python, JavaScript etc.

JavaScript is dynamically typed (also called loosely typed) scripting language. That is, in java script variables can receive different data types over time. Data types are basically typed of data that can be used and manipulated in a program.

- **Numbers**: 5, 6.5, 7 etc.
- **String**: “Hello” etc.
- **Boolean**: Represent a logical entity and can have two values: true or false.
- **Null**: This type has only one value : *null.*
- **Undefined**: A variable that has not been assigned a value is *undefined.*
- **Object**: It is the most important data-type and forms the building blocks for modern JavaScript. We will learn about these data types in details in further articles.