

Q1.Explain various methods console methods.

→The following are the various methods for console:

`assert()` -> This method is used for raising an error if the given assertion is false

`clear()` -> This method is used for clearing the console

`count()` -> This method is used for logging the number of instances when call to `count()` is made

`error ()` ->This method is used for giving output as an error message to console

`group()` -> This method is used for creating a new line group in the console and indents the console messages by an additional indent till `console.groupEnd()` function is called

`groupCollapsa()` -> This method is used for creating a new line group in the console which is collapsed and needs a disclosure button to expand it

`groupEnd()` -> This method is used for exiting the current inline group of the console

`info()` -> This method is used for giving output as an informational message to the console

`log()` -> This method is used for giving output as an message to the console

`table()`->This method is used for displaying tabular data as table

`time()` -> This method is used for starting the timer

`timeEnd()` -> This method is used for stopping the timer

`trace()` -> This method is used for giving output as a stack trace to console

`warn()` -> This method is used for giving output as a warning message to console

Q2.Explain difference between var let and const with code examples.

→ Var has a global scope it can be used everywhere in the function but let and const are only block scoped

→ Let variables can be upadated like var variables but cannot be declared again

→ Const variables can neither be updated nor be declared again and they must be initialised during declaration

→ Var and let can be declared without initialization

→ Examples:

```
1] var tester = "hey hi";
```

```
function test() {
```

```
var hello = "hello";
```

```
var tester = "Hola" ; // redeclared & updated
}
console.log(hello); // error: hello is not defined
console.log(tester); //hey hi
```

```
2]let greeting = "say Hi";
let times = 4;
if (times > 3) {
    let hello = "say Hello instead";
    console.log(hello); // "say Hello instead"
    hello = " hola";
    console.log(hello); // hola -> updated
    let hello ='hola';
    console.log(hello); //Identifier 'hello' has already been declared
}
console.log(hello) // hello is not defined
```

```
3] const schedule = "Lecture at 2.00pm";
    schedule = "Lecture at 2.30pm";// error: Assignment to constant variable.
```

Q3. Write a brief intro on datatypes in javascript.

➔ Some of the datatypes in JS are :

BigInt-> The number type represents both integer and floating point numbers. In JavaScript, the "number" type cannot represent integer values larger than $2^{53}-1$

String-> A string in JavaScript must be surrounded by quotes.

Boolean -> The boolean type has only two values: true and false. This type is commonly used to store yes/no values: true means "yes, correct", and false means "no, incorrect".

