Chapter 2

Expressions and Conditionals

- A fragment of code that produces a value is called an expression. Every value written literally is an expression, e.g., 77 or "Manas".

Operators

1. Arithmetic Operators

+	Addition
-	Subtraction
*	Multiplication
/	Division
**	Exponentiation
%	Modulus
++	Increment
--	Decrement

2. Assignment Operators

=	X = Y
+=	X = X + Y
-=	X = X − Y
*=	X = X * Y
/=	X = X / Y
%=	X = X % Y
**=	X = X ** Y

3. Comparison Operators

==	Equals to
!=	Not equals to
===	Equal value and type
!==	Not equal value or not equal type
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to

4. Logical Operators

&&	Logical and
||	Logical or
!	Logical not

5. <u>Ternary Operators</u>

- Evaluate a condition and executes a block of code based on the condition

```
condition ? expressionIfTrue : expressionIfFalse;
```

- Example Syntax of Ternary Operators looks like this:

```
let output = age >= 18 ? "You can Drive" : "You cannot Drive";
```

If Age is Greater than or equals to 18, You can Drive, else you cannot

<u>Comments in JavaScript</u>

- Sometimes we want our programs to contain a text which is not executed by the JavaScript Engine, such a text is called comments in JavaScript.
- A comment in JavaScript can be written as follows:

```
1  let a = 2; // This is a Single Line Comment
2
3  /*
4  This is
5  a multi-line
6  comment
7  */
8
9
```

- Sometimes comments are used to prevent the execution of some lines of code:

```
1   let execution = true;
2   // execution = false
3
4
```