**Video-2**

**What is variable, five things you need to declare a variable**

**// 5 things to declare a variable:**

// 1. short form of variable - var

// 2. variable's name - price

// 3. equal sign [ = ]

// 4. Set the value of a variable - 25

// 5. semicolone [ ; ] - It is like the fullstop of programming.

**Example:**

**var price = 25;**

**// Here 5 parts are:**

// 1. var

// 2. price

// 3. =

// 4. 25

// 5. ;

**Video-3**

**Variable type, Numeric, String, Boolean**

**// Numeric Variable**

var price = 21;

var age = 25;

var temparature = 37;

var riceprice = 70;

var love = 100;

**// String**

var name = "Abrar Fahad";

var name = 'Zarin Subah';

var address = "fatulla narayanganj";

**// Boolean**

var pass = true;

var subscribed = false;

**// To know more 'variable types' you need to google.**

// null

// undefined

// object

**Video-4**

**JavaScript Keyword, Variable name naming convention and best practice**

// ====================================================

**// Best Practice of Naming Variable:**

// ====================================================

**// 1. Reserved keyword is not allowed**

// Example:

// var true = 15;

// var delete = 'delete';

**// 2. Variable Name should be in a single word**

// Example:

// var bf name = '...'; **X**

**var bfname = '...'**

**// 3. Quotation mark is not allowed to declare variable name**

// Example:

// Var "name" = 'Usman';

**// 4. Rules for one more words to declare variable name -**

// Examle:

**var myofficeaddress = "Dhaka";**

// var my-office - address = "Dhaka"; **x**

**var my\_office\_address = "Dhaka";**

// \*\*\*

**var myOfficeAddress = "Dhaka";** // "camelcase" should be used

**var PIE = 3.14;** // Uppercase characters used in special case like constant.

**var price12 = 25;** // numbers can be applied in ending.

// var 12price = 25; **x** [But numbers are not allwed in starting]

var p45 = 90; // [But it is not understandable]

var userHomeAddress = 'katabon';

// var uha = 'katabon'; **x** [should not use abbreviation alltime]

// ===================================

**// SUMMARY**

// ====================================

**// SUMMARY of this module:**

// 1. Variable name should be written in one word.

// 2. "camelcase" should be used to write one more wods without space.

// 3. Reserved keyword is not allowed.

// 4. numbers can be applied in ending.

**Video-5**

**Simple Mathematical operations in JavaScript**

// =================================================

**// \*\*\* Simple Mathematical Operations \*\*\***

// ==================================================

**var onionPrice = 43;**

**var eggPrice = 42;**

**// To see the output of these variables: [run the program on console]**

console.log(onionPrice); // output: 43

console.log(eggPrice); // output: 42

**// To make addition of these variables: [run the program on console]**

console.log(onionPrice + eggPrice); // output: 85

**// The output of addition of these two variables We can declare it in one variable**

var totalPrice = onionPrice + eggPrice;

**// to see the output of this variable: [run the program on console]**

console.log(totalPrice); // output: 85

**// The output of subtraction of these two variables We can declare it in one variable**

var priceDifference = onionPrice - eggPrice;

**// to see the output of this variable: [run the program on console]**

console.log(priceDifference); // output: 1

**// Multiplication: We have eggPrice, we need eggQuantity.**

eggPrice = 42; // [Previously Declared variable so we don't write var before to say the value of this variable]

var eggQuantity = 5;

**// variable declaration for multiplication**

var totalEggPrice = eggPrice \* eggQuantity;

**// To see the output:**

console.log(totalEggPrice); // output: 210

**// Divide:**

var moneyAvailable = 100;

var orangePrice = 5;

**// variable declaration for Divide**

var orangeQuantity = (moneyAvailable / orangePrice);

**// To see the output:**

console.log(orangeQuantity); // output: 20

// =========================================

**// Mathematical-operators**

// ==========================================

// +, -, \*, / -----> Mathematical-operators

// =======================================

**// Special Edition**

**// [From Video-9]**

// ========================================

**// Modulus / Modulu [The remaining value after divide something equally]**

var mangoes = 7;

var students = 2;

var remaining = mangoes % students;

console.log(remaining); // output: 1 [remaining 1 after dividing 7 mangoes equally between 2 students.]

**Video-5**

**(advanced) Mathematical operation shorthand**

// ==========================================

**// RECAP of Previous Video**

// ===========================================

**// \*\*\* variable declaration:**

var price1 = 31;

var price2 = 10;

**// \*\*\* Some mathematical Operations:**

var sum = price1 + price2;

var difference = price1 - price2;

var multiplication = price1 \* price2;

var division = price1 / price2;

**// \*\*\* To see the output run these programs:**

console.log(sum); // output: 41

console.log(difference); // output: 21

console.log(multiplication); // output: 310

console.log(division); // output: 3.1

// ===================================

**// Present Video**

// ===================================

var doublePrice = price1 \* 2;

var newPrice = price1 + 10;

console.log(doublePrice); // output: 62

console.log(newPrice); // output: 41

**// To set the new value of previous declared variable then we will not use 'var' again**

price1 = price1 + 10;

console.log(price1); // output: 41

**// Shorthand System** [Common the price name and set '+=' in middle before new value] [Meaning: 10 added with price1]

price1 += 10;

console.log(price1); // output: 51

**// 10 Subtracted from price**

price1 -= 10;

console.log(price1); // output: 41

// ===================================

**// Overall summaray**

// ====================================

var age = 14; // variable declare

console.log(age); // output: 14

age = age + 1; // [Normal System to add]

console.log(age); // output: 15

age += 10; // [Shorthand System to add]

console.log(age); // output: 25

// \*\*\*\*\* =================================================== \*\*\*\*\*

**// Just add or deduct 1 we can use another shortcut**

// \*\*\*\*\* ==================================================== \*\*\*\*\*

age++; // [increase 1 of the previous value]

console.log(age); // output: 26

age--; // decrease 1 of the previous value

console.log(age); // output: 25

// same variable run and deduct

var price = 25;

price = price - 1; // Normal System to deduct

price -= 1; // shortcut system to deduct

price--; // shortcut system to decrease 1

console.log(price); // output: 24 / 23 / 22 [one by one deduction run]

// [Here output will be 22. here deduct 1 by 1 and show total output]