// Task 1: Simple Programs todo for variables

// 1. Declare four variables without assigning values and print them in console

var a;

var b;

var c;

var d;

console.log(a, b, c, d);

// 2.How to get value of the variable myvar as output

var myvar = 1;

console.log(myvar)

// 3.Declare variables to store your first name, last name, marital status, country and age in multiple lines

var firstNacome = "Pandi"

var lastName = "Durai"

var maritalStatus = "Married"

var Country = "Indian"

var age = "27"

// 4.Declare variables to store your first name, last name, marital status, country and age in a single line

var firstName = "Pandi",

    lastName = "Durai",

    maritalStatus = "Married",

    Country = "Indian",

    age = "27"

// 6. Convert the string to integer

parseInt()

// 7.Write 6 statement which provide truthy & falsey values.

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// Task 2: Simple Programs todo for Operators

//1. Square of a number

let variable = 5;

let squaredNumber2 = Math.pow(variable, 2);

console.log("5\*5 = ", squaredNumber2);

// 2. Swapping 2 number

var a = 5;

var b = 3;

[a, b] = [b, a];

console.log(a, b)

// 3. Addition of 3 number

const num1 = 5;

const num2 = 3;

const num3 = 2;

const sum = num1 + num2 + num3;

console.log(sum)

// 4.Celsius to Fahrenheit conversion

function cToF(celsius) {

    var cTemp = celsius;

    var cToFahr = cTemp \* 9 / 5 + 32;

    var message = cTemp + '\xB0C is ' + cToFahr + ' \xB0F.';

    console.log(message);

}

function fToC(fahrenheit) {

    var fTemp = fahrenheit;

    var fToCel = (fTemp - 32) \* 5 / 9;

    var message = fTemp + '\xB0F is ' + fToCel + '\xB0C.';

    console.log(message);

}

cToF(60);

fToC(45);

//5.  Meter to miles

var meters = 2500

var miles = meters / 1610;

console.log(miles);

// 6.Pounds to kg

var pounds = 20;

var kg = (pounds / 0.45359237)

console.log(kg);

// 7. calculate Batting Average

var BATSMAN = {

    firstName: "MSDoni",

    hits: 10,

    atBats: 30,

    calculateAVG: function() {

        this.avg = this.hits / this.atBats;

        return this.avg;

    }

}

BATSMAN.calculateAVG();

console.log(BATSMAN.firstName + 'has a batting average of' + BATSMAN.avg);

// 8.Calculate five test scores and print their averge

var scores = [500, 600, 450, 250, 220]

var total = 0;

for (var i = 0; i < scores.length; i++) {

    total += scores[i];

}

var avg = total / scores.length;

console.log(avg);

// 9.Power of any number x ^ y.

console.log("Power of any number x ^ y", Math.pow(10, 2));

// 10 Calculate Simple Interest

let P = 1,

    R = 1,

    T = 1;

let SI = (P \* T \* R) / 100;

console.log("simple Interest = " + SI)

// 11 . Calculate area of an equilateral triangle

let h = 10;

let B = 20;

let area\_triangle = ((1 \* B \* h) / 2);

console.log("area of an equilateral triangle", area\_triangle);

// 12.Area Of Isosceles Triangle

let a2 = 10;

let Area = (1 \* Math.pow(a2, 2)) / 2;

console.log("Area Of Isosceles Triangle", Area);

// 13 Volume Of Sphere

let radius = 5;

let volume = (4 / 3) \* Math.PI \* Math.pow(radius, 3);

console.log("volume of spare = " + volume);

// 14. Volume Of Prism

let length = 10;

let width = 5;

let height = 8;

let vol = length \* width \* height;

console.log("voluem of prism", vol);

// 15. Find area of a triangle.

let A = 10;

B = 7;

C = 25;

Area\_triangle = (((a \* b) \* (Math.sin(C))) / 2);

console.log(Area\_triangle);

16. // Give the Actual cost and Sold cost, Calculate Discount Of Product

getPrice = function() {

    var numVal1 = Number(document.getElementById("price").value);

    var numVal2 = Number(document.getElementById("discount").value / 100);

    var totalValue = numVal1 - (numVal1 \* numVal2)

    document.getElementById("total").value = totalValue.toFixed(2);

}

// 17.Given their radius of a circle and find its diameter, circumference and area.

radius\_circle = 10;

circle\_diameter = radius\_circle \* 2;

PI = Math.PI

circumference\_circle = 2 \* Math.pow(PI) \* radius\_circle;

Area\_circle = PI \* Math.pow(radius\_circle, 2);

console.log("circle diameter", circle\_diameter);

console.log("Area of circle", Area\_circle);

// 18.Given two numbers and perform all arithmetic operations\

var p = 10;

var q = 5;

var Add, sub, mult, div;

Add = p + q;

sub = p - q;

mult = p \* q;

div = p / q;

console.log("Add", Add, "sub", sub, "mult", mult, "div", div);