**Question: 4**

**<https://medium.com/@reach2arunprakash/www-guvi-io-zen-d395deec1373>**

**Task 1: Simple programs todo for variables**

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

Code:

let a;

let b;

let c;

let d;

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

Output:

undefined undefined undefined undefined

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



Code:

var myvar= 1;

      console.log(myvar);

Output:

1

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

Code:

var firstName = "William"

var lastName = "John"

var maritalStatus = "Single"

var country = "USA"

var age = 27

**4. Declare variables to store your first name, last name, marital status, country, and age in single lines**

Code:

let details ={firstName : "William",

lastName :"John",

maritalStatus: "Single",

Country:"USA",

age = 27};

**5. Convert string to integer**

* **parseInt()**
* **Number()**
* **Plus sign(+)**

Code:

parseInt() method: let a = "10";

let b = parseInt(a);

console.log(`value is ${b}`);

Number(): let c = "20";

let d = Number(c);

console.log(`value is ${d}`);

PlusSign(+): let e = "-30";

console.log(`value is ${e}`);

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

* false, zero and empty strings are all equivalent.
* null and undefined are equivalent to themselves and each other but nothing else.
* NaN is not equivalent to anything — including another NaN!.
* Infinity is truthy — but cannot be compared to true or false!.
* An empty array is truthy — yet comparing with true is false and comparing with false is true?!.

# **Task 2: Simple Programs todo for Operators**

1. **Square a number**

**Code:**

let a=9;

let square=Math.pow(a,2);

console.log(square);

**Output:**

81

1. **Swapping 2 numbers**

**Code:**

let a=9;

let b=8;

temp=a;

a=b;

b=temp;

console.log(a);

console.log(b);

**Output:**

a=8

b=9

1. **Addition of 3 numbers**

**Code:**

let a=9;

let b=8;

let c=10;

console.log(a+b+c);

**Output:**

27

1. **Celsius to Fahrenheit conversion**

**Code:**

let celcius=35;

fahrenhit=celcius\*1.8+32;

console.log(fahrenhit);

**Output:**

95

1. **Meter to miles**

**Code:**

let meter=3500;

miles=meter/1609.344;

console.log("Conversion of Meter to Miles:",miles);

**Output:**

**Conversion of Meter to Miles: 2.175**

1. **Pounds to kg**

**Code:**

let pound=35;

kg=pound\*0.45359237;

console.log("Conversion of pound to kg:",kg);

**Output:**

Conversion of pound to kg: 15.876

1. **Calculate Batting Average**

**Code:**

let run=5000;

let Matches=250;

let notout=50;

dismissal=Matches-notout;

console.log("Average score:",run/dismissal)

**Output:**

Average score: 25

1. **Calculate five test scores and print their average**

**Code:**

let score=[20,50,80,40,120];

sum=0;

for(i=0;i<score.length;i++)

{

    sum+=score[i];

}

console.log("Average score of 5 Test matches:",sum/5);

**Output:**

Average score of 5 Test matches: 62

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

**Code:**

let x=30;

let y=2;

pow=Math.pow(x,y);

console.log("pow value of x & y:",pow);

**Output:**

pow value of x & y: 900

**10.Calculate Simple Interest**

**Code:**

var P, R, T, SI;

P = 5000;

R = 3;

T = 5;

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

console.log(SI);

**Output:**

750

1. **Calculate area of an equilateral triangle**

**Code:**

let a=5;

area=(Math.sqrt(3)/4)a\*\*2;

console.log("Area of the equilateral triangle:",area);

**Output:**

Area of the equilateral triangle: 10.825

1. **Area Of Isosceles Triangle**

**Code:**

let base= 5;

let height=8;

area=((base\*height)/2);

console.log("The area of isosceles triangle:",area);

**Output:**

The area of isosceles triangle: 20.

1. **Volume Of Sphere**

let r=5;

volume=(4/3)\*3.14\*r\*r\*r;

console.log("Volume of the Sphere:",volume);

**Output:**

Volume of the Sphere: 523.33

**14.Volume Of Prism**

let r=5;

let h=6;

volume=(3.14\*(r\*\*2)\*h);

console.log("Volume of the cylinder:",volume);

Output:

Volume of the cylinder: 471

**15.Find area of a triangle**

let b=5;

let h=6;

area=(b\*h);

console.log("area of the cylinder triangle:",area);

**Output:**

area of the cylinder triangle: 30

1. **Give the Actual cost and Sold cost, Calculate Discount Of Product**

let Actual=800;

let sold=400;

Discount=(100\*(Actual-sold)/Actual);

console.log("Discount:",Discount+"%");

**Output:**

Discount: 50%

1. **Given their radius of a circle and find its diameter, circumference and area.**

let r=8;

console.log("Radius of the circle:",r\*r);

console.log("Area of the circle:",3.14\*Math.pow(r,2));

console.log("Circumference of the circle:",2\*3.14\*r);

**Output:**

Radius of the circle: 64

Area of the circle: 200.96

Circumference of the circle: 50.24

1. **Given two numbers and perform all arithmetic operations.**

let a=5;

let b=4;

console.log("Addition of a,b:",a+b);

console.log("subtraction of a,b:",a-b);

console.log("multiplication of a,b",a\*b);

console.log("division of a,b:",a/b);

console.log("modulus of a,b:",a%b);

console.log("Exponentiation of a,b:",a\*\*b);

a++;

c=a;

console.log("Increment:",c);

a--;

d=a;

console.log("Decrement:",d);

**Output:**

Addition of a,b: 9

subtraction of a,b: 1

multiplication of a,b 20

division of a,b: 1.25

modulus of a,b: 1

Exponentiation of a,b: 625

Increment: 6

Decrement: 5

1. **Display the asterisk pattern as shown below(No loop needed):**

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

Output:

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

1. **Calculate electricity bill?  
   For example, a consumer consumes 100 watts per hour daily for one month. Calculate the total energy bill of that consumer if per unit rate is 10?**

let dailyunit=100;

dailyconsumption=24\*100;

total=(30\*dailyconsumption)/1000;

console.log("Cost for one month electricity:",total\*10);

Output:

Cost for one month electricity: 720

# **Task 3: Simple Programs todo for Condition , Looping and Arrays**

**1. Write a loop that makes seven calls to console.log to output the following triangle:**

let sum="";

for(i=0;i<7;i++){

sum+="#";

console.log(sum);

}

**Output:**

**#**

**##**

**###**

**####**

**#####**

**######**

**#######**

1. **Create an array called foods holds the names of your top 20 favorite foods, starting with the best food.**

**Code:**

let foods = ["pasta","puri","pongal","keema","pulao","dosa","idly","chicken","mutton","khichdi","briyani","chaat","appam","samosa",

"chapati","paratha","tikka","crab","fish","corn",];

**3.Foods variable holds the names of your top 20 favorite foods, starting with the best food. How can you find your fifth favorite food?Find the length of your foods array?**

**Code:**

let foods = ["pasta","puri","pongal","keema","pulao",

"dosa","idly","chicken","mutton","khichdi",

"briyani","chaat","appam","samosa","chapati",

"paratha","tikka","crab","fish","corn",];

console.log(foods[4]);

console.log(foods.length);

**Output:**

**pulao**

**20**

1. **Starting from the existing friends variable below, change the element that is currently “Mari” to “Munnabai”.**

let friends = [

    "Mari",

    "MaryJane",

    "CaptianAmerica",

    "Munnabai",

    "Jeff",

    "AAK chandran"

    ];

   friends.splice(0,1,"Munnabai");

    function dataHandling(input){

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

    console.log(input[i]);

    }

    }

    dataHandling(friends);

**Output:**

**Munnabai**

**MaryJane**

**CaptianAmerica**

**Munnabai**

**Jeff**

**AAK chandran**

**4.Starting from the friends variable below, Loop and Print the names till you meet CaptianAmerica.**

const friends = [

    "Mari",

    "MaryJane",

    "CaptianAmerica",

    "Munnabai",

    "Jeff",

    "AAK chandran"

    ];

    function dataHandling(input){

    for (var i = 0; i < input.length-3; i++) {

    console.log(input[i]);

    }

    }

    dataHandling(friends);

**Output:**

**Mari**

**MaryJane**

**CaptianAmerica**