Question 1: Write a code

a. Square of a number

```
function square(n)
{
   let squ = n * n;
   return squ;
}
console.log(square(9));
```

b. Swapping two numbers

```
let a = 10;
let b = 20;
let temp;
temp = a;
a =b;
b = temp;
console.log(a,b);
```

c. 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"];

function friends(arr)
{
   for(let i =0;i<arr.length;i++)
   {
      if(arr[i] == "Mari")
      {
         arr[i] = "Munnabai";
      }
```

```
    }
    return arr;
}
console.log(friends(["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"]));
```

d. Print the content of the input variable.

```
var input = [
["0001", "Roman Alamsyah", "Bandar Lampung", "21/05/1989", "Membaca"],
["0002", "Dika Sembiring", "Medan", "10/10/1992", "Bermain Gitar"],
["0003", "Winona", "Ambon", "25/12/1965"],
["0004", "Bintang Senjaya", "Martapura", "6/4/1970", "Berkebun"]
];

for(let i =0;i<input.length;i++)
{
    for(let j =0;j<input[i].length;j++)
    {
        let output = input[i][j];
        console.log(output);
    }
    console.log( );
}
```

e. Write a loop that makes seven calls to console.log to output the following triangle.

```
let n =7;
let s ="";
for(let i =0;i<n; i++)
{
    for(let j =0;j<=i;j++)
    {
```

```
        s = s + "#";
    }
    s = s+"\n";
}
console.log(s);
```

Question 2 : Debugging javascript

a. Fix the below to alert Guvi geek.

```
let admin=9, fname=10.5;
fname = "Guvi";
lname = "geek"
admin = fname+lname;
alert( admin ); // "Guvi geek"
```

Answer:

```
let admin=9, fname=10.5;
fname = "Guvi";
lname = "geek"
admin = fname+" " + lname;
alert( admin ); // "Guvi geek"
```

b. Fix the below to alert Guvi geek.

```
let fname=10.5;
fname = "Guvi";
lname = "geek"
let name = fname+lname;
alert( 'hello ${name}' );
```

Answer:

```
let fname = 10.5;
fname = "Guvi";
lname = "geek"
let name = fname + " " + lname;;
alert( `hello ${name}`);
```

c. Fix the below to alert the sum of two numbers.

let a = prompt("First number?");

let b = prompt("Second number?");

alert(a + b);

Answer:

```
let a = parseInt(prompt("First number?"));
let b = parseInt(prompt("Second number?"));
alert(a + b);
```

d. If you run the below code you will get code is blasted. Change this to diffused.

var a = "2" > "12";

if (a) {

  console.log("Code is Blasted")

}

else

{

  console.log("Diffused")

}

Answer:

```
var a = 2 > 12;
if (a) {
  console.log("Code is Blasted");
}
else
{
  console.log("Diffused");
}
```

e. How to get the correct score in console.

let value = prompt('How many runs you scored in this ball');

if (value === 4) {

```
    console.log("You hit a Four");
} else if (value === 6) {
    console.log("You hit a Six");
} else {
    console.log("I couldn't figure out");
}
```

Answer:

```
let value = parseInt(prompt('How many runs you scored in this ball'));
if (value === 4) {
    console.log("You hit a Four");
} else if (value === 6) {
    console.log("You hit a Six");
} else {
    console.log("I couldn't figure out");
}
```

Question 3: Find the culprit and debugging the javascript.

a. Write a code to print the numbers in array.

Output: 1234567891011

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var new_string = " ";
for (var i = 1; i < 11; i--) {
 new_string += numsArr[i]
}
console.log(new_string);
```

Answer:

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var new_string = " ";

for (var i = 0; i < 11; i++) {
 new_string += numsArr[i];
}
console.log(new_string);
```

b. Write a code to print the numbers in array.

Output: 1,2,3,4,5,6,7,8,9,10,11

var numsArr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];

var new_string = “ “;

for (var i = 1; i < 11; i++) {

new_string += numsArr[i] + , }

console.log(new_string);

Answer:

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var new_string = " ";
let d;
for (var i = 0; i < 11; i++) {
 new_string += numsArr[i] + ",";
 d = new_string.slice(0,-1);
 }
console.log(d);
```

c. Write a code to print from last to first with spaces (Make sure there is no space after the last element 1)

Output: 11 10 9 8 7 6 5 4 3 2 1

var new_string = “”;

for (var i = 11; i > 0; i —) {

new_string += numsArr[i] + “ “ }

console.log(new_string);

Answer:

```
var new_string = " ";
let numsArr = [1,2,3,4,5,6,7,8,9,10,11];
for (var i = 10; i >=0; i--) {
 new_string += numsArr[i] + " ";
}
console.log(new_string);
```

d. Write a code to replace the array value — If the number is even, replace it with ‘even’.

Output:[1, “even”, 3, “even”, 5, “even”, 7, “even”, 9, “even”, …]

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
for (var i = 0; i <=10; i++) {
 if(numsArr[i] %2 == 0 )
 {
 numsArr[i] = odd
 }
}
console.log(numsArr);
```

Answer:

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
for (var i = 0; i <=10; i++) {
 if(numsArr[i] %2 == 0 )
 {
   numsArr[i] = "even";
 }
}
console.log(numsArr);
```

e. Write a code to replace the array value — If the index is even, replace it with ‘even’.

Output: [“even”, 2, “even”, 4, “even”, 6, “even”, 8, “even”, 10, …]

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
for (var i = 0; i <=10; i++) {
 if(numsArr[i] %2 == 0 )
 {
 numsArr[i] = even
 }
}
console.log(numsArr);
```

Answer:

```
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
for (var i = 0; i <=10; i++) {
 if(i % 2 == 0)
 {
 numsArr[i] = "even";
 }
}
console.log(numsArr);
```

Question 4 : Find the culprits and nail them in javascript.

a. Fix the code to Sum of the digits present in the number

Code:

let n = 123;

console.log(add(n));

function add(n)

{

let sum = 10;

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

sum+=n[i]

}

return sum; }

Answer:

```
function add(n)
{
n = n.split("");
let sum = 0;
let d;
for(var i=0;i<n.length;i++){
    d = parseInt(n[i]);
    sum = sum + d;
 }
 return sum;
}
console.log(add("123"));
```

b. Fix the code to Sum of all numbers using IIFE function

Code:

```
const arr = [9,8,5,6,4,3,2,1];
(function() {
 let sum = 0;
 for (var i = 0; i <= arr.length; i++);{
 sum += arr[i];
 }
 console.log(sum);
 return sum;
})();
```

Answer:

```
const arr = [9,8,7,6,5,4,3,2,1];
let sum =0;
(function() {
 for (var i = 0; i < arr.length; i++){
 sum += arr[i];
 }
 console.log(sum);
 return sum;
})();
```

c. Fix the code to gen Title caps.

Code:

```
var arr = [“guvi”, “geek”, “zen”, “fullstack”];
var ano = function(arro) {
 for (var i = 0; i <= arro.length; i++) {
 console.log(arro[i][0].toUpperCase() + arro[i].substr(1));
 }
}
ano();
```

Answer:

```
var arr = ["guvi", "geek", "zen", "fullstack"];
var ano = function(arr) {
 for (var i = 0; i < arr.length; i++) {
 console.log(arr[i][0].toUpperCase() + arr[i].substr(1));
 }
}
ano();
```

d. print all odd numbers in an array using IIFE function

Code:

```
var arr = [1, 2, 3, 5, 7, 79, 7, 2, 6, 9, 4];
(function() {
 for (var i = 0; i < arr.length; i++) {
 if (arr[i] % 2 === 0) {
 console.log(arr[i]);
 }}
})();
```

Answer:

```
var arr = [1, 2, 3, 5, 7, 79, 7, 2, 6, 9, 4];
(function() {
 for (var i = 0; i < arr.length; i++) {
 if (arr[i] % 2 != 0) {
 console.log(arr[i]);
 }}
})();
```

e. Fix the code to reverse.

Code:

```
(function(str){
 str1 = str.split(" ").reverse().join("");
 console.log(str1);
})("abcd")
```

Answer:

```
(function(str){
    let str1 = str.split("").reverse().join("");
    console.log(str1);
   })("abcd")
```