**COMSATS University Islamabad Attock Campus**



**Lab Assignment # 01**

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**Problem 1:**

Write program to print the kth digit from last. E.g. input 23617 and k=4 output 3.

var data = 123456789;

let temp = data;

let index = parseInt(prompt("Please enter the index"));

for (let i = 0; i < index; i++) {

value = temp % 10;

temp = temp / 10;

}

console.log("The value on this position is: " + parseInt(value));

**Problem 2:**

Write program to find sum of all digits. Input 23618 output 2+3+6+1+8=20

var value = 98765,

sum = 0;

console.log("Number: " + value);

while (value) {

sum += value % 10;

value = parseInt(value / 10);

}

console.log("Sum is: "+sum);

**Problem 3:**

Write program to find sum of even digits. Input 23617 output 2+6=8

let str1 = '123456';

var summ=0;

let arrays = str1.split("");

console.log(arrays);

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

if (arrays[i] % 2 == 0) {

summ += parseInt(arrays[i]);

}

}

console.log(summ);

**Problem 4:**

Write a JavaScript that calculates the squares and cubes of the numbers from 0 to 10.

for (i = 0; i <= 10; i++) {

var square = i \* i;

var cube = i \* i \* i;

console.log("square of " +i + ": " +square);

console.log("cube of " + i + ": " + cube);

}

**Problem 5:**

Develop and demonstrate JavaScript script that uses functions for the following problems:

1. Parameter: A string
2. Output: The position in the string of the left-most vowel

var str = prompt("Enter the Input");

str = str.toUpperCase();

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

var chr = str.charAt(i);

if (chr == 'A' || chr == 'E' || chr == 'I' || chr == 'O' || chr == 'U') break;

}

if (i < str.length)

console.log("The position of the left most vowel is: " + (i + 1));

else

console.log("No vowel found in the entered string");

1. Parameter: A number
2. Output: The number with its digits in the reverse order

var a = prompt("Enter The Query"),

b = parseInt(a),

z = 0;

if (b) {

while (b > 0)

var r = b % 10, z = z \* 10 + r, b = Math.floor(b / 10);

console.log("Entered number : " + a );

console.log("Given Number In Reverse Order : " + z);

}

else {

}

**Problem 6:**

Write a JavaScript program where the program takes a random integer between 1 to 10, the user is then prompted to input a guess number. If the user input matches with guess number, the program will display a message "You WIN" otherwise display a message "Not matched".

var y = Math.floor(Math.random() \* 10 + 1);

var x = prompt("Write you guess number?");

if (x == y) {

console.log("YOU WIN");

}

else if (x != y) {

console.log("Not matched");

}

else {

}

**Problem 7:**

Write a JavaScript program to check whether 10 appears in first or last position of a given array of integers. The array length must be greater or equal to 2.

var razzak = ['10', '2', '3', '4'];

var end\_point = razzak.length - 1;

if (razzak[0] == 10 && razzak[end\_point] == 10) {

console.log("10 is in start and end of the array");

}

else if (razzak[end\_point] == 10) {

console.log("10 is in end of the array");

}

else if (razzak[0] == 10) {

console.log("10 is in start of the array");

}

**Problem 8:**

Write a JavaScript function that returns a passed string with letters in alphabetical order.

**Example string: 'comsats'**

**Expected Output: 'acmost'**

function alphabet\_game(str) {

return str.split('').sort().join('');

}

console.log(alphabet\_game("COMSATS"));