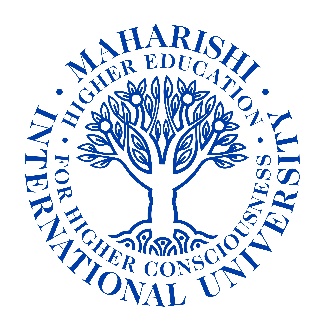
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**Assignment#5 – Loops**

**Question 1)** Write a JavaScript program that will read words from the keyboard until the word done is entered. For each word except done, report whether its first character is equal to its last character.

**Answer:**

**//getting the word from the user**

let word = prompt ("Please enter the word:");

**// using while loop if word is equal to done with ignore case**

while(word.toLowerCase() != "done"){

let word = prompt("Please enter the word:");

**//check if first and last character of the word are same**

if(word.charAt(0) === word.charAt(word.length - 1)){

**//displaying the result**

console.log("The first and last character of the word are same.");

}else{

console.log("The first and last character of the word are not same.")

}

}

**Question 2)** Write a JavaScript program that will compute the sum of the first *n* positive odd integers. For example, if *n* is 5, you should compute 1 + 3 + 5 + 7 + 9.

**Answer:**

**//get the integer from the user**

let n = parseInt(prompt("Please enter the integer:"));

**//Initializing the sum**

let sum = 0;

**// initializing the first odd number**

let firstOdd = 1;

**// looping from first odd number to or equal n**

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

sum += firstOdd;

**// increment should be by 2**

firstOdd +=2;

}

**//displaying the sum**

console.log(sum);

**Question 3)** Write a JavaScript program that will count the number of blank characters in each string.

**Answer:**

**//get the string from user**

let string = prompt("Please enter the text:");

//initializing the counter

let counter = 0;

**//use for loop to search the empty space in the string**

for(let i = 0; i<string.length; i++){

if(string.charAt(i) === " "){

counter++;

}

}

**//Displaging the result based counter**

if (counter > 0){

console.log("Total number of blank character in the given string are:" + " " + counter);

}else{

console.log("Blank character are not found.")

}

// You can write processes for this question

**Question 4)** Develop an algorithm for computing the month-by-month balance in your savings account. You can make one transaction—a deposit or a withdrawal—each month. Interest is added to the account at the beginning of each month. The monthly interest rate is the yearly percentage rate divided by 12.

**Answer:**

**//innitializing the the necessary variables**

let balance = parseFloat(prompt("Please enter the saving at the beginning of the 1st month:"));

let deposit = parseFloat(prompt("Please enter the deposit per month:"));

let withdrawal = parseFloat(prompt("Please enter the withdrawal per month:"));

let annualInterestRate = parseFloat(prompt("Please enter the interest rate per year:"));

let monthlyInterestRate = (annualInterestRate/12)/100;

let NUMBER\_OF\_MONTHS = 12;

let balEachMonth =0;

**// Interest each month**

let monthlyInterest = ((balance + deposit-withdrawal) \* monthlyInterestRate);

**//Balance each month**

balEachMonth = (balance + deposit + monthlyInterest) - withdrawal;

}