PSG COLLEGE OF TECHNOLOGY

DEPARTMENT OF COMPUTER APPLICATIONS

23MX15 Web Technologies JavaScript Worksheet 1 16.10.2023

Sample code:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Document</title>  </head>  <body>  <script>  //prompt returns string.  n = prompt("enter a number","0");  //parseInt is required to convert the string returned by prompt to Integer.  //other methods or //parseFloat..  x=parseInt(n)%2;  if ( x == 0) {console.log("even number") ;}  else {console.log("odd number"); }  </script>  </body> </html> |

Method 1: Save the above code in VS code as index.html and run in any browser. Open the terminal in VS code or console in developer tools to check the output

Method 2: Modify this as external javascript , name your js file as myscript\_1.js and link this file to index.html.

Execute the index.html file now.

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| --- |
| //myscript.js  //prompt returns string.  n = prompt("enter a number","0");  //parseInt is required to convert the string returned by prompt to Integer. Other methods or //parseFloat..  x=parseInt(n)%2;  if ( x == 0) {console.log("even number") ;}  else {console.log("odd number"); } |

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Document</title>  </head>  <body>  <script src="myscript.js">  </script>  </body>  </html> |

Method 3 : execute the script contents alone in vscode using the command node myscript.js

Using any of the above methodology write the JavaScript code for the following:

1. Print all the natural numbers from 1 to n : use while loop
2. Write a C program to print all natural numbers in reverse (from n to 1). – use while loop.
3. Write a C program to find sum of all natural numbers between 1 to n.
4. Write a C program to find sum of all even numbers between 1 to n.
5. Write a C program to print all alphabets from a to z. – using while loop
6. Write a C program to print all even numbers between 1 to 100. – using while loop-- NA
7. Write a C program to print all odd number between 1 to 100. --NA
8. Write a C program to print multiplication table of any number. -- 6
9. Write a C program to print all ASCII character with their values. --7
10. Write a C program to count number of digits in a number. --8
11. Write a C program to find first and last digit of a number.
12. Write a C program to find sum of first and last digit of a number.
13. Write a C program to swap first and last digits of a number. --9
14. Write a C program to calculate sum of digits of a number.
15. Write a C program to calculate product of digits of a number. --10
16. Write a C program to enter a number and print its reverse. --11
17. Write a C program to check whether a number is palindrome or not.--12
18. Write a C program to find frequency of each digit in a given integer. --13
19. Write a C program to enter a number and print it in words.
20. Write a C program to find power of a number using for loop. --14
21. Write a C program to find all factors of a number. -- 15
22. Write a C program to calculate factorial of a number.
23. Write a C program to find HCF (GCD) of two numbers.
24. Write a C program to find LCM of two numbers.
25. Write a C program to check whether a number is Prime number or not.
26. Write a C program to print all Prime numbers between 1 to n.
27. Write a C program to find all prime factors of a number.
28. Write a C program to check whether a number is Armstrong number or not.
29. Write a C program to print all Armstrong numbers between 1 to n.
30. Write a C program to check whether a number is Perfect number or not.
31. Write a C program to check whether a number is Strong number or not.
32. Write a C program to print Fibonacci series up to n terms.
33. Write a C program to find one’s complement of a binary number.
34. Write a C program to find two’s complement of a binary number.
35. Write a C program to convert Binary to Decimal number system.
36. Write a C program to convert Octal to Decimal number system.
37. Write a C program to convert Decimal to Binary number system.
38. Write a C program to convert Decimal to Octal number system.
39. Write a C program to convert Hexadecimal to Binary number system.
40. Write a C program to print Pascal triangle upto n rows.

**While solving the above problems, explore data types, conditional statements, looping statements , === operator in JavaScript.**