

# ITWS1 - Fall 2017 (IIIT Sricity)

## Practice Assignment 7

---

1. What will be the output of followings in JavaScript:

- I.  $2+3+"7"+"15"$
- II.  $2+3+"7"+2+3+5$
- III.  $5+"8"+\text{true}+\text{false}$
- IV.  $5+\text{true}+"8"+\text{true}$

2. Write the output of the following code segment:

```
<script>
    var sum = new Array(6); var Total = 0; sum[0] = 0;
    for(var icount = 1; icount < 4; icount++) {
        Total += icount;
        sum[icount] = Total;
        document.write(sum[icount]+"<br>")
    }
    document.write(Total)
</script>
```

3. Point out the errors in the following code and write the corrected script:

```
<script>
    var A=10; var B=6;
    switch A%B {
        case 0;
            document.write("The input is:");
            break;
        case 1;
            document.write("The color is:")
            break;
        else;
            document.write("You didn't choose")
    }
</script>
```

4. Write a Javascript program to find the value of  $\sum_{i=1}^n i!$ . Read the value of n from an input box. Display the result in an output box.

5. Write a Javascript program to check whether a given string/number is palindrome or not (see below layout). Read the string/number using an input box. Display the output using an alert window.

Enter a String/Number:

6. Write a Javascript program to check whether a given number is even or odd. Take the input using prompt and display the result using alert. Display a message "Input is not a number" if input is not a number.
7. Write a Javascript program to produce n Fibonacci number. Read the value of n from an input box. Your program should create n output boxes automatically stacked vertically over each other and display n Fibonacci values starting from top.
8. Write a Javascript program to display the age of a person in terms of number of years, months and days through an alert window. Ask the user to select day and month of DOB using the dropdowns and to enter the year using an input box. Use the Date() function to read the current Day, Month and Year.
9. Write the HTML code to generate the below mentioned web page layout and JavaScript code for the click event of the button which will display the alert message "Eligible for Voting" if the following validations are true:
  - The age should be > 18
  - The nationality should be "Indian"

The alert message "Not Eligible for Voting" should be displayed if any of the above mentioned validations are false.

#### Enter the details

Enter your nationality:

Enter your age:

10. Write a JavaScript program to design the below mentioned calculator. The inputs are given from the input boxes, the operator is selected from the select box having four operators namely plus (+), minus (-), times (\*), and divide (/), and the output is generated and printed in an output box after clicking the button "answer". In below example, the first operand is 10, the second operand is 20, and the operator selected is times, thus the output is 200.

#### Calculator

10	<div> <div>*</div> <div>▼</div> <div>+</div> <div>-</div> <div style="background-color: #007bff; color: white;">*</div> <div>/</div> </div>	20	=	200	<input type="button" value="answer"/>
----	---	----	---	-----	---------------------------------------

11. Write a JavaScript program to find the largest of numbers from a 2-d matrix  $n \times n$ . Read the value of  $n$  from an input box, read  $n \times n$  numbers using prompt and display the matrix. Finally display the largest number in a output box.

12. Write the output of the following JavaScript codes with justification:

- I. `<script>`  
     `foo();`  
     `function foo(){`  
         `document.write("Inside foo")`  
     `};`  
`</script>`
- II. `<script>`  
     `bar();`  
     `var bar=function(){`  
         `document.write("Inside bar")`  
     `};`  
`</script>`

13. Write a JavaScript program to design the below mentioned unique random number generator. Initially, all five boxes are empty. After clicking the button "Generate Unique Random Numbers", the program generates five unique numbers in between 1 and 5. It means that all five numbers generated are in between 1 and 5 and different to each other.

14. Write a Javascript program to create a table having 2 rows and 2 columns. Here, you have to write your code inside `<script>` and `</script>` to generate the table as follows:

```

<html><body>
  <script>
    //Code to generate the table
    .
    .
    .
  </script>
</body></html>

```

15. Write a JavaScript program to store the first table below in a variable and then find the mean marks for the entries and use this mean marks to decide the grade for each one. Display the result in a table having three columns as Name, Average and Grade.

Following is the student's marks data:

Name	ITWS1	CP	DEC	MATHS-1
ABC	89	67	99	34
DEF	56	34	100	56
GHI	78	90	67	65
JKL	45	45	78	54
MNO	95	67	89	65
PQR	30	56	90	87

Find the grade using following table:

Marks	Grade
$\geq 90$	A
$\geq 80$ and $< 90$	A-
$\geq 70$ and $< 80$	B
$\geq 60$ and $< 70$	B-
$\geq 50$ and $< 60$	C
$\geq 40$ and $< 50$	C-
$< 40$	F