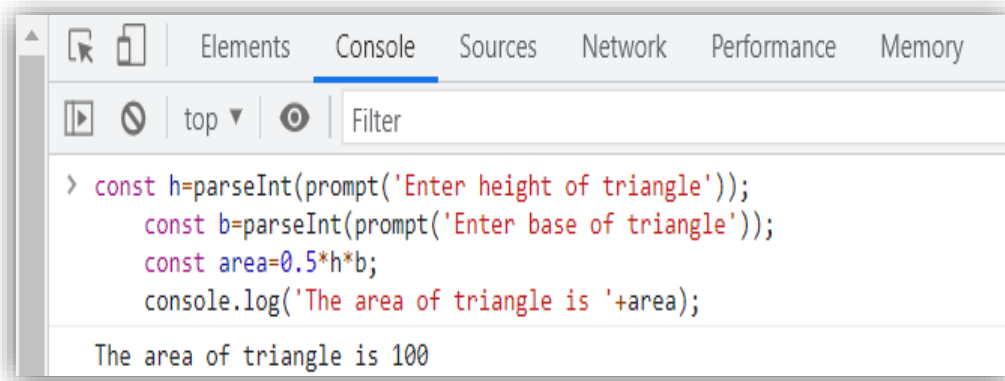


# MILESTONE 4

**1- Write a program in JavaScript to calculate the area of the triangle .**

```
const h=parseInt(prompt('Enter height of triangle'));//10
const b=parseInt(prompt('Enter base of triangle'));//20
const area=0.5*h*b;
console.log('The area of triangle is '+area);
```



**2-Write a program to remove whitespaces from text**

```
const string=' Sakshi Thapa ';
const ans=string.split(' ').join("");
console.log(ans);
```

```
< undefined  
> const string=' Sakshi Thapa  ';  
const ans=string.split(' ').join('');  
console.log(ans);  
SakshiThapa  
< undefined
```

### 3-Write a program to make a simple calculator use all 5-6 operations in this.

let result;

const number1 = parseFloat(prompt('Enter first number: '));

const number2 = parseFloat(prompt('Enter second number: '));

const operator = prompt('Enter operator (+, -, \*, / or %');

switch(operator) {

case '+':

result = number1 + number2;

console.log(`\${number1} + \${number2} = \${result}`);

break;

case '-':

result = number1 - number2;

console.log(`\${number1} - \${number2} = \${result}`);

break;

case '\*':

result = number1 \* number2;

```
    console.log(`${number1} * ${number2} = ${result}`);  
    break;
```

```
case '/':
```

```
    result = number1 / number2;  
    console.log(`${number1} / ${number2} = ${result}`);  
    break;
```

```
case '%':
```

```
    result = number1 % number2;  
    console.log(`${number1} % ${number2} = ${result}`);  
    break;
```

```
default:
```

```
    console.log('Invalid Choice for the operator');  
    break;
```

```
}
```

```

< undefined
> let result;

const number1 = parseFloat(prompt('Enter first number: '));
const number2 = parseFloat(prompt('Enter second number: '));

const operator = prompt('Enter operator (+, -, *, / or %)');

switch(operator) {
  case '+':
    result = number1 + number2;
    console.log(`${number1} + ${number2} = ${result}`);
    break;

  case '-':
    result = number1 - number2;
    console.log(`${number1} - ${number2} = ${result}`);
    break;

  case '*':
    result = number1 * number2;
    console.log(`${number1} * ${number2} = ${result}`);
    break;

  case '/':
    result = number1 / number2;
    console.log(`${number1} / ${number2} = ${result}`);
    break;

  case '%':
    result = number1 % number2;
    console.log(`${number1} % ${number2} = ${result}`);
    break;

  default:
    console.log('Invalid Choice for the operator');
    break;
}

11 + 11 = 22
< undefined

```

#### 4-Write a program to display current date and time.

```

let today = new Date();

const date = today.getDate()+"/"+ (today.getMonth()+1) + "/"
    + today.getFullYear();

const time = today.getHours() + ":" + today.getMinutes() + ":" +
today.getSeconds();

console.log("Date =" + date)
console.log("Time =" + time)

```

```

> let today = new Date();
const date = today.getDate()+"/"+ (today.getMonth()+1) + "/"
          + today.getFullYear();
const time = today.getHours() + ":" + today.getMinutes() + ":" + today.getSeconds();
console.log("Date =" + date)
console.log("Time =" + time)

Date =28/11/2021
Time =21:33:51

```

**5-Write a JavaScript program to check the total marks of a student in various examinations. The student will get A+ grade if the total marks are in the range 89..100 inclusive, if the examination is "Final-exam." the student will get A+ grade and total marks must be greater than or equal to 90. Return true if the student get A+ grade or false otherwise**

```

function exam_status(totalmarks,is_exam){
if(is_exam){
return totalmarks>=90;
}
return (totalmarks>=89 && totalmarks<=100);
}
console.log(exam_status("78"," "));
console.log(exam_status("89","true "));
console.log(exam_status("99","true "));

```

```

> function exam_status(totalmarks,is_exam){
  if(is_exam){
    return totalmarks>=90;
  }
  return (totalmarks>=89 && totalmarks<=100);
}
console.log(exam_status("78"," "));
console.log(exam_status("89","true "));
console.log(exam_status("99","true "));

false
false
true
< undefined

```

## 6-Write a JavaScript program to print the contents of the current window.

```

function print_current_page()
{
  window.print();
}

```

We use window.print for printing the contents of the current window.

## 7-Write a JavaScript program to determine whether a given year is a leap year in the Gregorian calendar

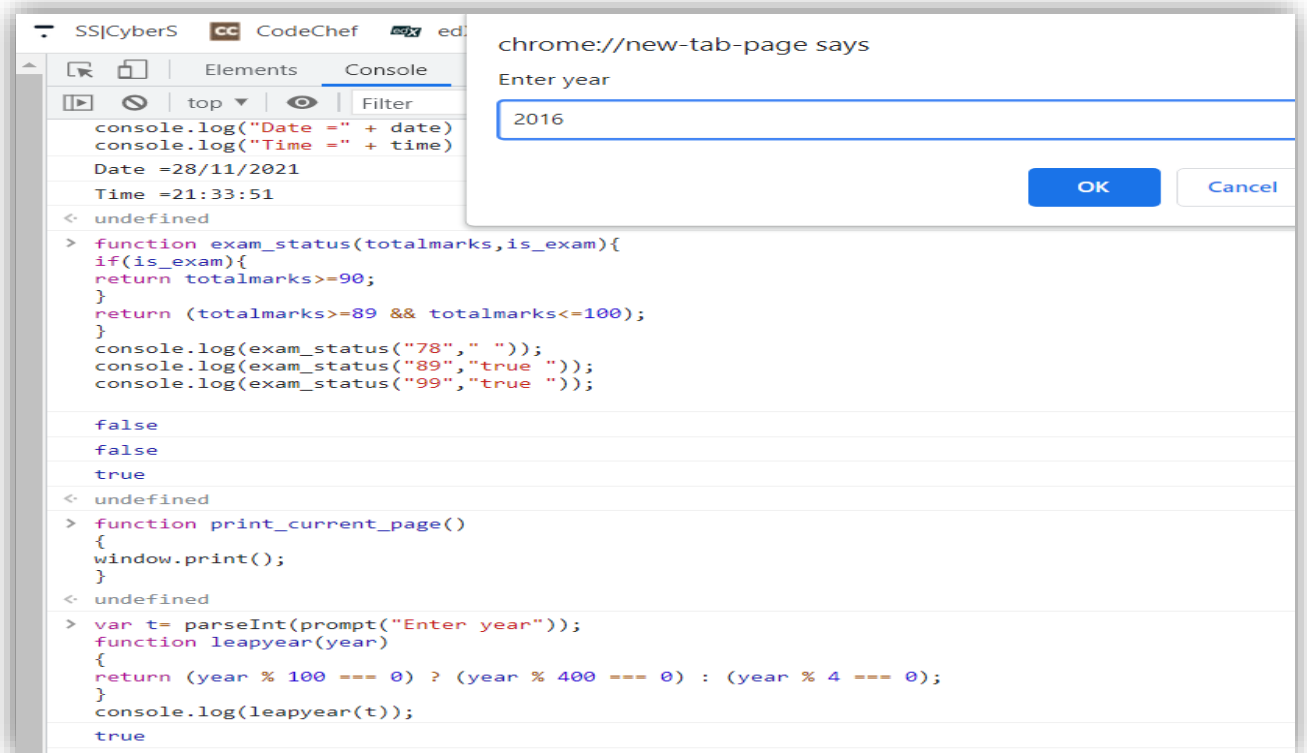
```

var t= parseInt(prompt("Enter year"));

function leapyear(year)
{
  return (year % 100 === 0) ? (year % 400 === 0) : (year % 4 === 0);
}

console.log(leapyear(t));

```



**8-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 "Good Work" otherwise display a message "Not matched".**

```
const n=Math.ceil(Math.random()*10);
console.log(n);
const gnum=prompt('Guess the number between 1 and 10');//1
if(gnum==n)
console.log('Matched');
else
console.log('Not matched,the number was '+gnum);
```

```

> const n=Math.ceil(Math.random()*10);
   console.log(n);
   const gnum=prompt('Guess the number between 1 and 10');
   if(gnum==n)
   console.log('Matched');
   else
   console.log('Not matched,the number was '+gnum);
5
Not matched,the number was 1
< undefined

```

## 9-Write a JavaScript program to get the website URL (loading page).

```
console.log("The URL of this page is:"+window.location.href);
```

```

< undefined
> console.log("The URL of this page is:"+window.location.href);
The URL of this page is:chrome://new-tab-page/
< undefined
> const checkString = ( x ) => {

```

## 10-Write a JavaScript function to check whether an `input` is a string or not

```

const checkString = ( x ) => {
  if (typeof(x) === 'string' )
    console.log("it is string")
  else
    console.log("it is not a string")
}
checkString(9)
checkString("abc")

```



```

> const checkString = ( x ) => {
    if (typeof(x) === 'string' )
      console.log("it is string")
    else
      console.log("it is not a string")
  }
  checkString(9)
  checkString("abc")

it is not a string

it is string

< undefined

```

### 11-Write a JavaScript exercise to get the extension of a filename.

```

const str = prompt("ENTER A FILENAME WITH EXTENSION");//system.php
//abc.js

function getFileExtension(str){
  const index = str.lastIndexOf('.')
  if(index===-1)
    return "entered filename does not have extension"
  else
  {
    const ext = str.substr(index+1)
    return ext
  }
}

getFileExtension(str)

```

```

> const str = prompt("ENTER A FILENAME WITH EXTENSION")

function getFileExtension(str){
  const index = str.lastIndexOf('.')
  if(index===-1)
    return "entered filename does not have extension"
  else
  {
    const ext = str.substring(index+1)
    return ext
  }
}
getFileExtension(str)
< 'php'

> const str = prompt("ENTER A FILENAME WITH EXTENSION")

function getFileExtension(str){
  const index = str.lastIndexOf('.')
  if(index===-1)
    return "entered filename does not have extension"
  else
  {
    const ext = str.substring(index+1)
    return ext
  }
}
getFileExtension(str)
< 'js'

```

**12-Write a JavaScript program to create a new string adding "Py" in front of a given string. If the given string begins with "Py" then return the original string.**

```

const str = prompt("ENTER ANY RANDOM STRING");//Python and Sakshi
if(str.substring(0,2)=="Py")
console.log(str)
else
{
  const newstr="Py"+str
  console.log(newstr)
}

```

```

> const str = prompt("ENTER ANY RANDOM STRING")
if(str.substring(0,2)=== "Py")
  console.log(str)
else
{
  const newstr="Py"+str
  console.log(newstr)
}

```

Python

< undefined

```

> const str = prompt("ENTER ANY RANDOM STRING")
if(str.substring(0,2)=== "Py")
  console.log(str)
else
{
  const newstr="Py"+str
  console.log(newstr)
}

```

PySakshi

< undefined

### 13-Write a JavaScript program to find the largest of three given integers.

```
const num1 = parseInt(prompt("Enter first number: "));//7
```

```
const num2 = parseInt(prompt("Enter second number: "));//9
```

```
const num3 = parseInt(prompt("Enter third number: "));//5
```

```
let largest;
```

```
if(num1 >= num2 && num1 >= num3) {
```

```
    largest = num1;
```

```
}
```

```
else if (num2 >= num1 && num2 >= num3) {
```

```
    largest = num2;
```

```
}
```

```
else {
```

```
    largest = num3;
```

```
}
```

```
console.log("The largest number is " + largest);
```

⏪ undefined

```
> const num1 = parseInt(prompt("Enter first number: ")); //7  
const num2 = parseInt(prompt("Enter second number: ")); //9  
const num3 = parseInt(prompt("Enter third number: ")); //5  
let largest;
```

```
if(num1 >= num2 && num1 >= num3) {  
    largest = num1;  
}  
else if (num2 >= num1 && num2 >= num3) {  
    largest = num2;  
}  
else {  
    largest = num3;  
}
```

```
console.log("The largest number is " + largest);
```

The largest number is 9

⏪ undefined