PART A

(Part A: TO BE REFFERED BY STUDENTS)

Experiment No. 05

A.1 AIM:

Implement basic JavaScript operators, conditional statements, loops etc.

A.2 Pre requisite:

Basic Knowledge of HTML and JavaScript

A.3 Outcome:

After successful completion of this experiment students will be able to:

1. Create formatted web pages/websites with attractive look and feel
2. Use various JavaScript features

A.4 Theory:

JavaScript is the programming language of the Web. All modern HTML pages are using JavaScript.

JavaScript is one of **3** languages all web developers **MUST** learn:

1. **HTML** to define the content of web pages
2. **CSS** to specify the layout of web pages
3. **JavaScript** to program the behavior of web pages

JavaScript operators

JavaScript operators are symbols that are used to perform operations on operands.

There are following types of operators in JavaScript.

1. Arithmetic Operators
2. Comparison (Relational) Operators
3. Bitwise Operators
4. Logical Operators

5. Assignment Operators
6. Special Operators

JavaScript Loops

The JavaScript loops are used to iterate the piece of code using for, while, do while or for-in loops. It makes the code compact. It is mostly used in array.

There are three types of loops in JavaScript.

1. **for loop**

```
for (initialization; condition; increment)
{
    code to be executed
}
```

2. **while loop**

```
while (condition)
{
    code to be executed
}
```

3. **do-while loop**

```
do{
    code to be executed
}while (condition);
```

A.5 Procedure/Task:

1. Write a JavaScript program to find the area of a triangle where lengths of the three of its sides are 5, 6, 7.

2. Write a JavaScript program to compute the sum of the two given integers. If the two values are same, then returns triple their sum.

3. Write a JavaScript function that reverse a number.

4. Write a JavaScript function that accepts a string as a parameter and converts the first letter of each word of the string in upper case.

5. Write a JavaScript conditional statement to find the largest of five numbers. Display an alert box to show the result.

6. Write a JavaScript program which compute, the average marks of the following students Then, this average is used to determine the corresponding grade.

Student Name	Marks
David	80
Vinoth	77
Divya	88
Ishitha	95
Thomas	68

The grades are computed as follows:

Range	Grade
<60	F
<70	D
<80	C
<90	B
<100	A

7. Write a JavaScript program to construct the following pattern, using a nested for loop.

```
*
* *
* * *
* * * *
* * * * *
```

PART B

(PART B: TO BE COMPLETED BY STUDENTS)

(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the Blackboard or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no Black board access available)

Roll No. :	Name:
Class :	Batch :
Date of Experiment :	Date/Time of Submission :
Grade :	

B.1 Code:

(Paste your Code here)

B.2 Output

(Take screen shots of the output at run time and paste it here)

B.3 Conclusion:

(Students must write the conclusion as per the attainment of individual outcome listed above)

B.3 Observations and Learning:

(Students must write their observations and learnings as per the attainment of individual outcome listed above)