**ASSIGNMENT 1**

**Question 1**

What will the code below output to the console and why ?

1. console.log(1 + "2" + "2");
2. console.log(1 + +"2" + "2");
3. console.log(1 + -"1" + "2");
4. console.log(+"1" + "1" + "2");
5. console.log( "A" - "B" + "2");
6. console.log( "A" - "B" + 2);

**Answer**

Output : 122

Reason: ‘1’ is the integer whereas ‘2’ & ‘2’ are strings. They are appended by the ‘+’ operator. So the output is ‘122’.

Output : 32

Reason: Here ‘1’ & ‘2’ gets added due to ‘++’ operator and the other ‘2’ is printed as a string.

Output : 02

Reason: Here ‘1’ & ‘-1’ gets added and gives a value ‘0’ and the ‘2’ is printed as a string.

Output : 112

Reason: Here every individual ,i.e., ‘1’ , ‘1’ , ‘2’ , are printed as strings.

Output : Nan2

Reason: Here , ‘Nan’ value is given as ‘A’ & ‘B’ can not be joined using ‘-’ operator whereas ‘2’ is printed as a string.

Output : Nan

Reason: Since ‘2’ is an integer over here , so unlike ‘A’ & ‘B’ , 2 is also not printed. Hence gives a ‘Nan’ value.

**Question 2**

You are given a variable “marks”. Your task is to print:

- AA if the mark is greater than 90

- AB if the mark is greater than 80 and less than or equal to 90

- BB if the mark is greater than 70 and less than or equal to 80

- BC if the mark is greater than 60 and less than or equal to 70

- CC if the mark is greater than 50 and less than or equal to 60

- CD if the mark is greater than 40 and less than or equal to 50

- DD if the mark is greater than 30 and less than or equal to 40

- FF if the mark is less than or equal to 30

**Answer**

**Code :-**

<html>

<head>

<title>Marksheet</title>

</head>

<body>

<h1>Marksheet</h1>

<script>

var marks = 90;

if (marks > 90)

{

console.log('AA');

}

else if (marks > 80 && marks <= 90)

{

console.log('AB');

}

else if (marks > 70 && marks <= 80)

{

console.log('BB');

}

else if (marks > 60 && marks <= 70)

{

console.log('BC');

}

else if (marks > 50 && marks <= 60)

{

console.log('CC');

}

else if (marks > 40 && marks <= 50)

{

console.log('CD');

}

else if (marks > 30 && marks <= 40)

{

console.log('DD');

}

else

{

console.log('FF');

}

</script>

</body>

</html>