

27 June 2024

## SurpriseTest:

1. SumofOnlyPositiveNumbers.
2. Write aJavaScriptprogramto calculatethedaysleftbefore Christmas.
3. WriteaJavaScriptprogramtodeterminewhetheragivenyear is a leap year in the Gregorian calendar.

## PROGRAM1:

```
let x=0,sum=0;
while(x<=10)
{
    sum=sum+x;
    x++;
}
console.log('sumofpositivenumbers:',sum);
```

## OUTPUT:

```
PSC:\Users\dell\Documents\Javascript.js>node
"c:\Users\dell\Documents\Javascript.js\sum.js"
```

sumofpositivenumbers:55

## PROGRAM2:

```
let todayDate=new Date();
console.log("Today's date is defined as:",todayDate) let
christmasYear = todayDate.getFullYear();
if(todayDate.getMonth()==11&&todayDate.getDate()>25){ christmasYear =
    christmasYear + 1;
}

let christmasDate=new Date(christmasYear,11,25);
```

```

let dayMilliseconds=1000*60*60*24; let
daysLeft = Math.ceil(
    (christmasDate.getTime()-todayDate.getTime())/(dayMilliseconds)
);
console.log("Thenumberofdaysleftforchristmasis:") console.log(daysLeft)

```

## OUTPUT:

PSC:\Users\dell\Documents\Javascript.js>node  
 "c:\Users\dell\Documents\Javascript.js\yr.js"

Today'sdateisdefinedas:2024-06-27T13:08:28.068Z The  
 number of days left for christmas is:

181

## PROGRAM3:

```

functionisLeapYear(year){ if
(
    year%100===0?year%400===0:year%4===0
)
    console.log("Inputyear:",year,"isaLeapYear");
else
    console.log(
        "Inputyear:",
        year,
        "isNOTaLeapYear"
    );
}

let inputYear = 2020;
isLeapYear(inputYear);
inputYear = 2021;
isLeapYear(inputYear);
inputYear = 2022;
isLeapYear(inputYear);
inputYear = 2023;
isLeapYear(inputYear);
inputYear=2024;

```

```
isLeapYear(inputYear);  
inputYear = 2025;  
isLeapYear(inputYear);
```

## OUTPUT:

```
PS C:\Users\dell\Documents\Javascript.js> node  
"c:\Users\dell\Documents\Javascript.js\tempCodeRunnerFile.js"
```

Input year: 2020 is a Leap

YearInputyear:2021isNOTaLeapYea

r Inputyear:2022isNOTaLeapYear

Inputyear:2023isNOTaLeapYear

Input year: 2024 is a Leap

YearInputyear:2025isNOTaLeapYea

r