Training Day15 report

27 June 2024

Surprise Test:

1. Sum of Only Positive Numbers.
2. Write a JavaScript program to calculate the days left before Christmas.
3. Write a JavaScript program to determine whether a given year is a leap year in the Gregorian calendar.

PROGRAM 1:

```javascript
let x=0, sum=0;
while(x<=10)
    {
        sum=sum+x;

        x++;
    }
    console.log('sum of positive numbers:' , sum);
```

OUTPUT:

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

sum of positive numbers: 55

PROGRAM 2:

```javascript
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("The number of days left for christmas is: ")
console.log(daysLeft)
```

OUTPUT:

Today's date is defined as: 2024-06-27T13:08:28.068Z

The number of days left for christmas is:

181

PROGRAM 3:

```
function isLeapYear(year) {
    if (
        year % 100 === 0 ? year % 400 === 0 : year % 4 === 0
    )
        console.log(" Input year:", year, "is a Leap Year");
    else
        console.log(
            " Input year:",
            year,
            "is NOT a Leap Year"
        );
}

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 Year

 Input year: 2021 is NOT a Leap Year

 Input year: 2022 is NOT a Leap Year

 Input year: 2023 is NOT a Leap Year

 Input year: 2024 is a Leap Year

 Input year: 2025 is NOT a Leap Year