

- 1) Write a program that asks the user for a number n and prints the sum of the numbers 1 to n

```
<!DOCTYPE html>
<html>
  <body>
    <script>
      number = parseInt(prompt('Enter a positive integer: '));
      let sum = 0;
      // looping from i = 1 to number
      // in each iteration, i is increased by 1
      for (let i = 1; i <= number; i++) {
        sum += i;
      }
      document.write('The sum of natural numbers:', sum);
    </script>
  </body>
</html>
```

The sum of natural numbers:15

- 2) Modify the previous program such that only multiples of three or five are considered in the sum, e.g. 3, 5, 6, 9, 10, 12, 15 for n=17

```
<!DOCTYPE html>
<html>
  <body>
    <script>number = parseInt(prompt('Enter a positive integer: '));
    for(var i=1;i<=number;i++){
      if (i % 3 == 0 || i % 5 == 0)
      {
        document.write(i);
        document.write('<br>')
      }
    }
  </script>
</body>
</html>
```

3
5
6
9
10
12
15

3) Make a function that returns "even" or "odd" depending on the number passed to it.

```
parity(1); --> "odd"  
parity(2); --> "even"
```

```
<!DOCTYPE html>  
<html>  
  <body>  
    <script>  
      number = parseInt(prompt('Enter a positive integer: '));  
  
      // looping from i = 1 to number  
      // in each iteration, i is increased by 1  
      function EO(number){  
        if(number % 2 == 0){  
          return "Even number";  
        }  
        else  
        {  
          return "Odd number";  
        }  
        document.write(EO(number));  
      }  
    </script>  
  </body>  
</html>
```

Odd number

5) Write a program that prints the next 20 leap years.

```
<!DOCTYPE html>
<html>
  <body>
    <script>var year = prompt("please input a year to find out the next 20
years");
    var yearsPrinted = 0;
    var currentYear = parseInt(prompt('Enter a year: ')); //maybe these
variables should be declared inside the function
    function leapYears() {
      while (yearsPrinted < 20) { //instead of "20", you can have a var
howManyLeapYears for how many leap years we want printed
        if ((currentYear % 4 === 0) && (!((currentYear % 100===0) &&
(currentYear % 400 !== 0)))) {
          //can we simplify the line above?
          document.write(currentYear + "<br>");
          yearsPrinted++;
          currentYear++;
        }
        else
        {
          currentYear++;
        }
      }
    }leapYears();
    </script>
  </body>
</html>
```

2004
2008
2012
2016
2020
2024
2028
2032
2036
2040
2044
2048
2052
2056
2060
2064
2068
2072
2076
2080

- 7) Create a Simple page that lets users enter a currency value in dollars and convert the value in other currencies.

E.g.1 dollar is:

- a. 74.28 INR (Indian Rupee)
- b. 109.14 Yen (Japanese Yen)
- c. 0.84 Euro (Euro)
- d. 0.72 Pound sterling (Pound sterling)

```
<!DOCTYPE html>
<html>
  <body>
    <script>var Dollar = parseInt(prompt('Enter a Currency value in dollar:
'));
    document.write('Convert the value in other currencies: ');
    document.write("<br>");document.write(Dollar+"dollar is :");
    document.write("<br>");var Rupee=Dollar*74.28;
    document.write(Rupee+" INR(Indian Rupee)" );
    document.write("<br>");var yen=Dollar*109.14;
    document.write(yen+" Yen(Japanese Yen)");
    document.write("<br>");var Euro=Dollar*0.84;
    document.write(Euro+" Euro(Euro)");
    document.write("<br>");var poun=0.72*Dollar;
    document.write(poun+" Pound sterling(Pound sterling)");
    document.write("<br>");
    </script>
  </body>
</html>
```

Convert the value in other currencies:

1dollar is :

74.28 INR(Indian Rupee)

109.14 Yen(Japanese Yen)

0.84 Euro(Euro)

0.72 Pound sterling(Pound sterling)