

Class 05

DSA In JavaScript

WITH SHERYIANS CODING SCHOOL

LOOPS

AND

NUMBER OPERATIONS

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1. Sum of Digits

Input : 123

Output: 6

```
let n = Number(prompt("Enter a number"));
let originalNum = n;
let sum = 0;
while(n > 0){
    let rem = n % 10;
    sum += rem;
    n = Math.floor(n / 10);
}
console.log(`Sum of ${originalNum} is ${sum}`);
```

Swipe for more



2. Reverse a Number

Input : 123

Output : 321

```
let n = Number(prompt("Enter a number"));
let originalNum = n;
let sum = 0;
while(n > 0){
    let rem = n % 10;
    sum += rem;
    n = Math.floor(n / 10);
}
console.log(`Sum of ${originalNum} is ${sum}`);
```

Swipe for more



3. Automorphic Number

A number whose square ends in the same digits as the number itself.

Input : 5, $\Rightarrow 5^2 = 25$ (ends with 5)

Output : 5 is an automorphic number

```
let sq = n * n;
let count = 0;
while (n > 0) {
    count++;
    n = Math.floor(n / 10);
}
let lastDigits = sq % Math.pow(10, count);
if (lastDigits === originalNum) {
    console.log(`${originalNum} is an automorphic number because last ${count} digits of ${sq} is ${lastDigits}`);
} else {
    console.log(`${originalNum} is not an automorphic number because last ${count} digits of ${sq} is not ${originalNum}`);
}
```

Swipe for more

