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Full Stack Web Development Lab(PMCA601P)

1. Write a JavaScript program to find the cipher text of a given plain text using ceaser cipher.

```
function ce(text, shift) {
let result = "";
for (let i = 0; i < text.length; i++) {
let val = text.charCodeAt(i);
if(val>=65 && val<=90){
char = String.fromCharCode((val - 65 + shift)%26 + 65);
}
else if(val>=97&& val<=122){
char = String.fromCharCode((val - 97 + shift)%26 + 97);
}
else char = text[i];
result = result + char;
}
return result;
}
const plaintext = "Welcome to VIT";
const shift = 3;
const ciphertext = ce(plaintext, shift);
console.log("Original Text:", plaintext);
console.log("Cipher Text:", ciphertext);
```

OUTPUT:

```
node /tmp/xeIIvsfGYS.js
Original Text: Welcome to VIT
Cipher Text: Zhofrph wr YLW
```

2. Write a Javascript program to check if the given year is leap year or not.

```
function lp(y) {
  if ((y % 4 === 0 && y % 100 !== 0) || y % 400 === 0) {
    return true;
  } else {
    return false;
  }
}

var yearToCheck = 2028;
if (lp(yearToCheck)) {
  console.log(yearToCheck + " is a leap year.");
} else {
  console.log(yearToCheck + " is not a leap year.");
}

```

OUTPUT:

```
node /tmp/xeIIvsfGYS.js
2028 is a leap year.
```

3. Write a Javascript program that has an array of reviews good/bad. Display the count of good and bad reviews.

```
function cr(reviews) {
  let gc = 0;
  let bc = 0;
```

```
  for (let i = 0; i < reviews.length; i++) {
    if (reviews[i] === "good") {
      gc++;
    } else if (reviews[i] === "bad") {
      bc++;
    }
  }

  return { good: gc, bad: bc };
}

const reviewsArray = ["good", "bad", "good", "good", "bad", "good", "bad"];
const reviewCounts = cr(reviewsArray);

console.log("Good reviews:", reviewCounts.good);
console.log("Bad reviews:", reviewCounts.bad);
```