

Strings Manipulation and Palindromes - Deep Understanding

String Manipulation / Palindrome Check har dafa yeh cheezen involve hoti hain:

| Cheez | Kaam |

|-----|-----|

| Conditional Statement (if-else) | Check karna ke string barabar hai ya nahi |

| Loop (for, while) | Character by character traverse karna ya reverse karna |

| Function | Logic ko baar baar use karna |

| Arrow Function | Chhoti aur smart tarike se function likhna |

Examples:

Example 1: Using if-else

```
let str = "madam";
```

```
let reversed = str.split("").reverse().join("");
```

```
if (str === reversed) {
```

```
  console.log("Palindrome hai");
```

```
} else {
```

```
  console.log("Palindrome nahi hai");
```

```
}
```

Example 2: Using Loop

```
let str = "madam";

let reversed = "";

for (let i = str.length - 1; i >= 0; i--) {

  reversed += str[i];

}

if (str === reversed) {

  console.log("Palindrome hai");

} else {

  console.log("Palindrome nahi hai");

}
```

Example 3: Using Function

```
-----

function isPalindrome(str) {

  let reversed = str.split("").reverse().join("");

  return str === reversed;

}

console.log(isPalindrome("madam")); // true
```

Example 4: Using Arrow Function

```
-----

const isPalindrome = (str) => str === str.split("").reverse().join("");

console.log(isPalindrome("madam")); // true
```

Short Line:

"Logic banane ke liye if-else,

Traversal karne ke liye loop,

Repeat karne ke liye function,

Short likhne ke liye arrow function."