6. What is destructuring?

Destructuring allows extracting values from arrays or objects. It makes code shorter and cleaner. It improves readability. It is widely used in modern JavaScript.

---

27. What is the spread operator?

The spread operator (...) expands arrays or objects. It is used to copy or merge data. It helps avoid mutation. It simplifies code.

---

28. What is a ternary operator?

It is a shorthand for if-else. It has three parts: condition, true result, false result. It makes code concise. It improves readability when used properly.

---

29. What is strict mode?

Strict mode enforces better coding practices. It prevents the use of undeclared variables. It catches silent errors. It improves code security.

---

30. What is a single-page application (SPA)?

An SPA loads a single HTML page and updates content dynamically. It provides a fast user experience. It avoids full page reloads. React and Angular use this model.

1. Reverse a String

```
#include <stdio.h>

#include <string.h>

int main(){

    char s[100];

    scanf("%s", s);

    int i, j;

    char temp;

    for(i=0, j=strlen(s)-1; i<j; i++, j--){

        temp = s[i];

        s[i] = s[j];

        s[j] = temp;

    }

    printf("%s", s);
```

```c
}
```

---

2. Check Palindrome

```c
#include <stdio.h>
#include <string.h>
int main(){
    char s[100];
    scanf("%s", s);
    int i, n = strlen(s);
    for(i=0; i<n/2; i++){
        if(s[i] != s[n-i-1]){
            printf("Not Palindrome");
            return 0;
        }
    }
    printf("Palindrome");
}
```

---

3. Find Factorial (Recursive)

```c
#include <stdio.h>
int fact(int n){
    if(n==0) return 1;
    return n * fact(n-1);
}
int main(){
    int n;
    scanf("%d", &n);
    printf("%d", fact(n));
}
```