

**Que 1):Program on Palindrome number in nodejs**

**ANS:**

```
var num=121;  
var no=num;  
var rev=0;  
while(num>0){  
    var rem=num%10;  
    rev=rev*10+rem;  
    num=num/10;  
}  
if(rev==no){  
    console.log('The given no is Palindrome no..');  
}  
else{  
    console.log('Not Palindrome');  
}
```

**Que):Program on Reverse program in nodejs**

**ANS:**

```
var num=121;  
var no=num;  
var rev=0;  
while(num>0){  
    var rem=num%10;  
    rev=rev*10+rem;  
    num=num/10;  
}
```

```
console.log(rev);
```

Que):Program on Factorial in nodejs.

ANS:

```
var no=4  
  
var fact=1;  
  
for(let i=1;i<=no;i++){  
  
    fact=fact*i;  
  
}  
  
console.log(fact);
```

Que): Program on Palindrome String in nodejs

ANS:

```
function isPalindrome(str) {  
  
    // Remove non-alphanumeric characters and convert to lowercase  
  
    const cleanStr = str.replace(/[^a-zA-Z0-9]/g, "").toLowerCase();  
  
    let isPalindrome = true;  
  
    // Use a for loop to iterate through each character in the first half of the string  
  
    for (let i = 0; i < Math.floor(cleanStr.length / 2); i++) {  
  
        const char = cleanStr[i];  
  
        const oppositeChar = cleanStr[cleanStr.length - 1 - i];  
  
        // If characters don't match, set isPalindrome to false  
  
        if (char !== oppositeChar) {
```

```

    isPalindrome = false;

    break; // No need to continue checking once a mismatch is found

}

}

return isPalindrome;

}

// Example usage:

const inputString = "A man, a plan, a canal, Panama!";

const result = isPalindrome(inputString);

if (result) {

    console.log(`"${inputString}" is a palindrome.`);

} else {

    console.log(`"${inputString}" is not a palindrome.`);

}

```

## Que):Patterns program in nodejs

ANS:

```

function printRightAngledTriangle(height) {

    for (let i = 1; i <= height; i++) {

        let row = "";

        for (let j = 1; j <= i; j++) {

            row += '*';

        }

        console.log(row);

    }
}

```

```
}
```

```
// Example usage:
```

```
const rightTriangleHeight = 5;
```

```
printRightAngledTriangle(rightTriangleHeight);
```