

Module 20-Apply JavaScript Concepts

20-1 Module Introduction Apply JS and let, const

Let: value of variable could change

Const : value of the variable will not be change

```
//let const
// value of variable could change
let num=23;
num=40;

console.log(num);

// value of the variable will not be change

const name="sdsd";
name="saiwjajs";
console.log(name);
```

20-2 Unit Convert Inch to Feet, miles to kilometer

```
// Convert Inch to Feet
var inches=132;
var feet=inches/12;

console.log(feet);

console.log("Function");
// Function
function inchToFeet(inch)
{
    var feet=inch/12;
    return feet;
}

console.log("inch to feet : ",inchToFeet(112));

// miles to kilometer
function mileToKilometer(miles)
{
    var km=miles*1.60934;
    return km;
}
```

```
}  
  
console.log("miles to kilometer : ",mileToKilometer(23));
```

20-3 Check even and odd number using function

```
function even_odd(num) {  
    if (num % 2 == 0) {  
        return true;  
    }  
    return false;  
}  
  
console.log("Even or Not : ", even_odd(20));  
console.log("Even or Not : ", even_odd(25));
```

20-4 Check whether a year is a Leap Year or not

```
function check_leapyear(year) {  
  
    //three conditions to find out the leap year  
    if ((0 == year % 4 && 0 != year % 100) || 0 == year % 400) {  
        return true;  
    }  
    return false;  
}  
  
console.log("Leap year or not: ",check_leapyear(2090));  
console.log("Leap year or not: ",check_leapyear(2012));
```

20-5 Calculate Factorial of a number using for loop

```
let fact=1;  
  
for(let i=1;i<=5;i++)  
{  
    fact=fact*i;  
}  
console.log(fact);
```

20-6 Recalculate factorial multiple times using a function

```

function factorial(n) {
  let answer = 1;
  if (n == 0 || n == 1) {
    return answer;
  } else {
    for (var i = 1; i <= n; i++) {
      answer = answer * i;
    }
    return answer;
  }
}
let n = 4;
answer = factorial(n);
console.log("The factorial of " + n + " is " + answer);

```

20-7 Factorial using a while loop or a decrementing loop

```

function factorial(n) {
  let answer = 1;
  if (n == 0 || n == 1) {
    return answer;
  } else {
    for (var i = n; i >= 1; i--) {
      answer = answer * i;
    }
    return answer;
  }
}
let n = 4;
answer = factorial(n);
console.log("The factorial of " + n + " is " + answer);

```

20-8 Module Summary and Simple JavaScript debug