



SUB-SEQUENCES

Stage1

```
function f1()
{
  console.log("Entering function");
  console.log("Leaving function");
}

f1();
```

Stage2

```
function sum(a,b)
{
  console.log("Entering function");
  let sum = a + b;
  console.log("The sum of a & b is --> " + sum);
  console.log("Leaving function");
}

sum(5,5);
```

Stage3

```
function sum(a,b = 20)
{
  console.log("Entering function");
  let sum = a + b;
  console.log("The sum of a & b is --> " + sum);
  console.log("Leaving function");
}

sum(5);
```





Stage4 (Spread Operator)



```
let a = [10,20];

function sum(a,b)
{
  console.log("Entering function");
  let sum = a + b;
  console.log("The sum of a & b is --> " + sum);
  console.log("Leaving function");
}

sum(...a);
```

Stage5

```
function sum(a,b)
{
  console.log("Entering function");
  let r = a + b;
  console.log("Leaving function");
  return r;
}

let result = sum(10,60);

console.log("The sum is --> " + result);
```

Stage6





```
function sum()  
{  
  console.log("Entering function");  
  let r = arguments[0] + arguments[1];  
  console.log("Leaving function");  
  return r;  
}  
  
let result = sum(10,60);  
  
console.log("The sum is --> " + result);
```

Stage7

```
function sum()  
{  
  let r = 0;  
  console.log("Entering function");  
  for(let i=0;i<arguments.length;i++)  
  {  
    r = r + arguments[i];  
  }  
  console.log("Leaving function");  
  return r;  
}  
  
let result = sum(10,20,30,40);  
  
console.log("The sum is --> " + result);
```

Stage8 (Rest Parameter)





```
function sum(...a)
{
    let r = 0;
    console.log("Entering function");
    for(let i=0;i<a.length;i++)
    {
        r = r + a[i];
    }
    console.log("Leaving function");
    return r;
}

let result = sum(10,20,30,40);

console.log("The sum is --> " + result);
```

Stage9

```
function f1(a,b)
{
    console.log("Entering function");
    let sum = a + b;
    let average = sum / 2;
    let r = [sum,average]
    console.log("Leaving function");
    return r;
}

let result = f1(10,20);
let [v1,v2] = f1(10,20);

console.log("The result is --> " + result);

console.log("The sum is --> " + v1);
console.log("The average is --> " + v2);
```

Stage10





```
function f1(a,b)
{
    console.log("Entering function");
    let s = a + b;
    let av = s / 2;
    let r = {
        sum : s,
        average : av
    };
    console.log("Leaving function");
    return r;
}

let result = f1(10,20);
let {average:v1,sum:v2} = f1(10,20);

console.log("The result is --> ",result);

console.log("The sum is --> ",v1);
console.log("The average is --> ",v2);
```

Stage11

```
function sum(a,b)
{
    console.log("Entering function");
    let r = a + b;
    console.log("Leaving function");
    return r;
}

let v1 = sum(1,2);
let v2 = sum(v1,sum(3,4));
let v3 = sum(sum(1,2),sum(sum(1,2),sum(1,2)));
let v4 = v3 + sum(1,1) + sum(v2,sum(sum(4,5),sum(6,7)));

console.log("The value of v1 is --> ",v1);
console.log("The value of v2 is --> ",v2);
console.log("The value of v3 is --> ",v3);
console.log("The value of v4 is --> ",v4);
```



