

```
//curring ekta programming paradim/patarn aita kono concept na just ekta patarn.
```

```
//simple function
```

```
function multiply(a, b, c) {  
    return a * b * c;  
}
```

```
console.log(multiply(5, 6, 7));
```

//ekta function a jodi multiple parameter thake she gulu k bangy ekta ekta kora ja i tokhon she tai hossa curring.

```
// What is curring?
```

```
// converting a function which has multiple parameter & convert it single parameter function.
```

```
//curring function
```

```
function curringMultiply(a){  
    return function(b){  
        return function(c){  
            return a * b * c;  
        };  
    };  
}
```

```
// console.log(curringMultiply(5, 6, 7));//ai vabe call na kore pottek ta step k alada alada kore fali
```

```
let step1 = curringMultiply(5);
```

```
let step2 = step1(6);
```

```
let step3 = step1(7);//ai process ai khane a function pottek bar return kore bari ya ashse
```

```
console.log(step3);//closer er jonno ai pottek step a value mone rakhese
```

```
console.dir(step1);
```

//ekta online shop ache ami ekhon 10% discount dibo er jonno ekta function banabo

```
//Simple function
```

```
function discount(price, disc) {  
    return price - price * disc;  
}
```

```
let customer1Discount = discount(600, .1)//10% discount dibo .1
let customer2Discount = discount(700, .1);
let customer3Discount = discount(800, .1);//ai khane ekta problem ase .1 bar bar
repet korsi bole dicci .1 discount koro So ai repect amra korbo na
```

```
//curring function
function discount(disc) {
  return (price) => {
    return price - price * disc;
  }
}
```

```
let tenPercentDiscount = discount(0.1);
let customer1D = tenPercentDiscount(600);
let customer2D = tenPercentDiscount(100);
let customer3D = tenPercentDiscount(500);
console.log(customer1D);//output: 540
console.log(customer2D);//output: 90
```

```
//20% discount dibo
```

```
let tenPercentDiscount = discount(0.1);
let twentyPercentDiscount = discount(0.2);
let customer1D = tenPercentDiscount(600);
let customer2D = tenPercentDiscount(100);
let customer3D = tenPercentDiscount(500);
let customer4D = twentyPercentDiscount(100);
console.log(customer1D);//output: 540
console.log(customer2D);//output: 90
```

```
//Curring patarn er shate r ekta concept choley ashe sheta holo partial function
let tenPercentDiscount = discount(0.1);// aita partial function
//partial function holo jake poro botity abr reuse korbo
```

```
//ekta curry convator function banabo
```

```
//simpe function ja curry function a use korbo
```

```

function sum(a, b, c){
    return a + b + c;
}

let curriedSum = curry(sum); //curry function
console.log(curriedSum(1, 2, 3));
console.log(curriedSum(1) (2, 3));
console.log(curriedSum(1) (2) (3)); //step kore pass korlam curry follo kore

//ekta curry convator function banabo
function curry(func){ //ai function ta carry function er kase pathabo
    return function curried(...args){ //variable number of args receive korbe ...args
        // ...args er modda (1, 2, 3) ai 3 ta agrs chole ashle ami ekta args array pabo
        if( args.length >= func.length){ //arg .length = (curriedSum(1, 2, 3), func.length)
            h = sum(a, b, c)
            return func.apply(this, args); //ai func call korsi ai khane so args or ...args a
            i vabe pathate parbo na karon tahole sum er kase ekta array choly jabey
            //apply a 1st argument pathate hoi amr context ta ki mane kake diya function ta
            call korabo //this diya bojaci curent contex //apply normally function k call e k
            ore but args gulo k variable akare pathasi so sum er variavle gula k koma separat
            e akare pabey
        }else{ //akhon stepping korbo ((1) (2) (3)) ai vabe pathanor jonno
            return function(...args2){ //multiple stepping //...args2 aita mane ami curried su
            m er modda koita pathasi
            return curried.apply(this, args.concat(args2));
        };
    }
};

//simpe function ja curry function a use korbo
function sum(a, b, c){
    return a + b + c;
}

let curriedSum = curry(sum); //curry function
console.log(curriedSum(1, 2, 3));
console.log(curriedSum(1)(2, 3));
console.log(curriedSum(1)(2)(3)); //step kore pass korlam curry follow kore
//Output: 6 6 6

```

```
//lodash er ekta function ache _.curry so amra seta use korte pari amder ai vabe
curry function na banale o cholbe
//html file a lodash er link ta anbo
//same output ashby
function sum(a, b, c){
    return a + b + c;
}
```

```
let curriedSum = _.curry(sum);
console.log(curriedSum(1, 2, 3));
console.log(curriedSum(1)(2, 3));
console.log(curriedSum(1)(2)(3));
//Output: 6 6 6
```

```
//Last example
function log(date, importance, message){
    console.log(`${date.getHours()} : ${date.getMinutes()} : ${date.getSeconds} : ${im
portance} : ${message}`);
}
```

```
//lodash include korbo mane link add korbo
let curriedLog = _.curry(log);

curriedLog(new Date(), "DEBUG", "some debug");
curriedLog(new Date())("DEBUG")("some Debug");//ai 2 ta e same answer dibe

let logNow = curriedLog(new Date());
logNow(INFO, "info message");//bar bar Date dite hosse na
```

```
//ager example ta arraw function  
const multiply = (a) => (b) => (c) => a * b *c;  
  
console.log(multiply(5)(6)(7));
```