

Map, filter and arrow function

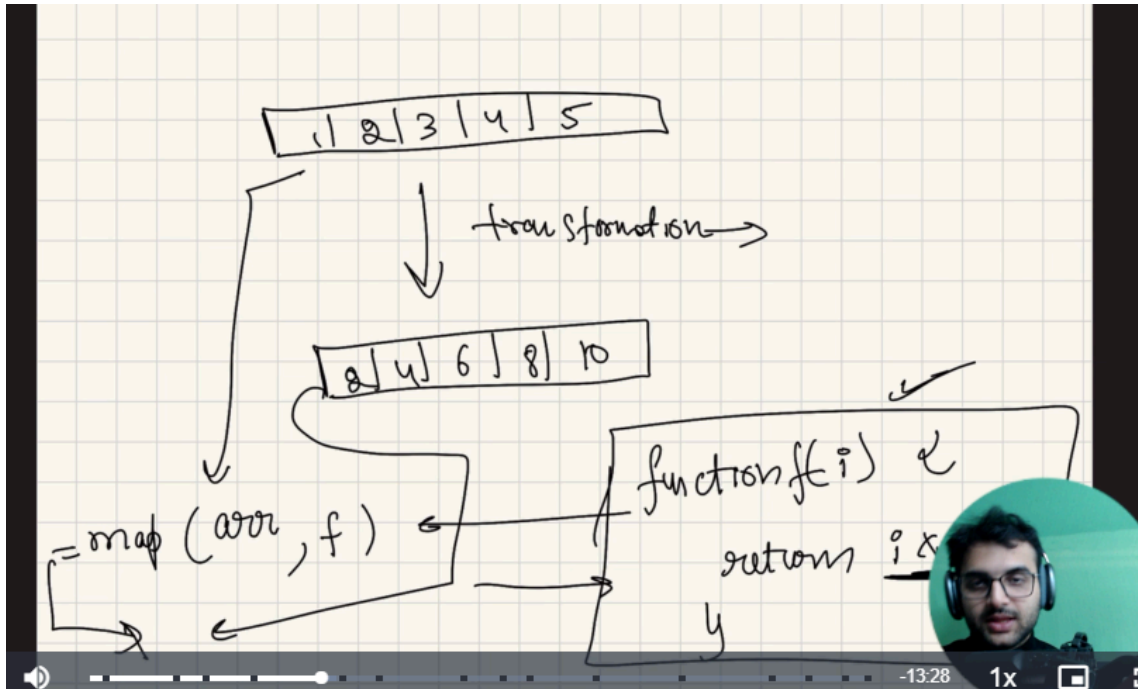
Arrow function:

```
const sum = (a,b) => {  
    return a+b;  
}  
  
app.get("/",(req,res) => {  
  
}))
```

Map and filter

Without map and filter

```
// given an array, give me back a new array in which every value is  
multiplied by 2  
// [1,2,3,4,5] => [2,4,6,8,10]  
  
const input = [1,2,3,4,5];  
  
const newArray = [];  
for( let i = 0; i < input.length; i++) {  
    newArray.push(input[i] * 2);  
}  
console.log(newArray); //[ 2, 4, 6, 8, 10 ]
```



Here map will return us the desire output

map global function take arr as input and the function as input and give output.

- 1) arr
- 2) f (transformation function)

`map(arr,f)`

```
const input = [1,2,3,4,5];

// transformation function
function transform(i){
  return i * 2;
}

const ans = input.map(transform);
console.log(ans); // [ 2, 4, 6, 8, 10 ]
```

Another solution

```
const input = [1,2,3,4,5];

const ans = input.map(function(i){
    return i * 2;
});

console.log(ans); //[ 2, 4, 6, 8, 10 ]
```

Q. Finding even no. from an array

```
const arr = [1,2,3,4,5];

const newArr=[];
for(let i=0; i<arr.length; i++){
    if(arr[i]%2===0){
        newArr.push(arr[i]);
    }
}

console.log(newArr); //[ 2, 4 ]
```

Other way

We will do logic according to the input

```
const arr = [1,2,3,4,5];

function filteringLogic(n){
    // we need to give true and false logic
    if(n%2===0){
        return true;
    }else{
        return false;
    }
}

const newArr = arr.filter(filteringLogic);
console.log(newArr); //[ 2, 4 ]
```