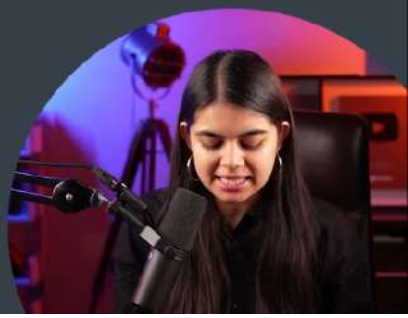

20

this Keyword

"This" keyword refers to an object that is executing the current piece of code.



01. _this_ in JavaScript.mp4

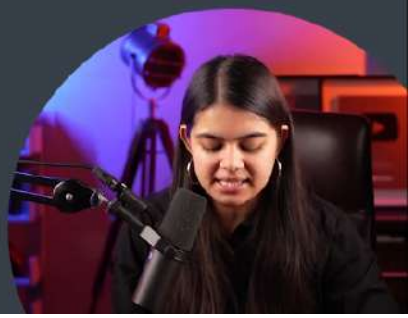
JS

try & catch

The try statement allows you to define a block of code to be tested for errors while it is being executed.

The catch statement allows you to define a block of code to be executed, if an error occurs in the try block.

```
try {
    console.log(a);
} catch {
    console.log("variable a doesn't
}
```



JS

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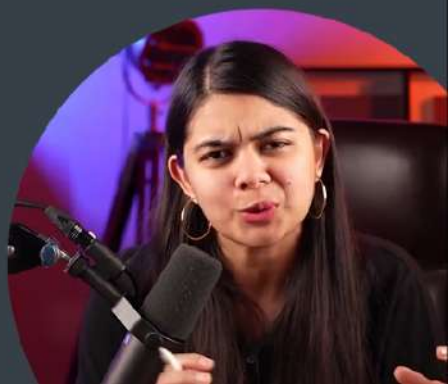
Arrow Functions

const func = (arg1, arg2 ..) => { function definition }

```
const sum = (a, b) => {
    console.log(a+b);
}
```



JS

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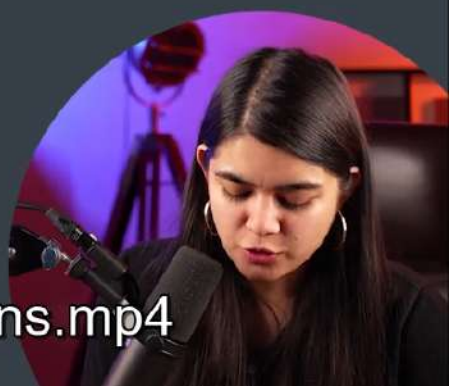
Arrow Functions

Implicit return

const func = (arg1, arg2 ..) => { value }

```
const mul = (a, b) => (
    a * b
);
```



04. Implicit Return in Arrow Functions.mp4

JS

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Set Timeout

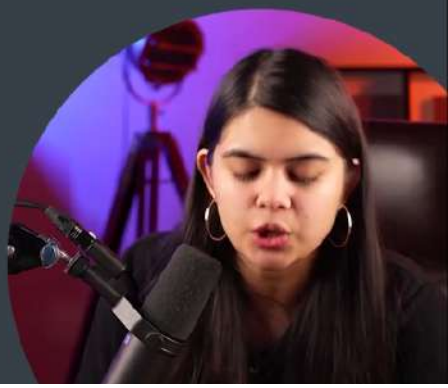
setTimeout(function, timeout)

callback time

```
console.log("hi there!");

setTimeout( ()=> {
    console.log("Apna College");
}, 4000);

console.log("welcome to");
```



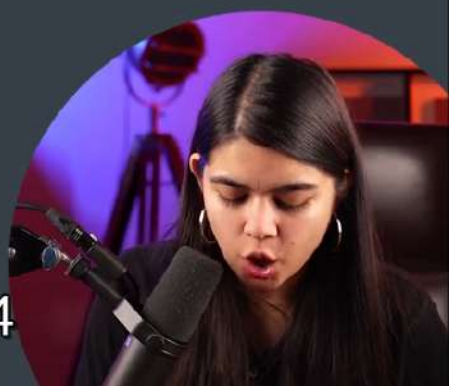
APNA COLLEGE

Set Interval

setInterval(function, timeout)

```
setInterval( () => {
    console.log("Apna College");
}, 2000);
```

clearInterval(id)



06. Set Interval Function.mp4

JS

Qs1. Write an arrow function named arrayAverage that accepts an array of numbers and returns the average of those numbers.

Qs2. Write an arrow function named isEven() that takes a single number as argument and returns if it is even or not.

Qs3. What is the output of the following code :

```
const object = {
    message: 'Hello, World!',

    logMessage() {
        console.log(this.message);
    }
};

setTimeout(object.logMessage, 1000);
```

Qs4. What is the output of the following code :

```
let length = 4;
function callback() {
    console.log(this.length);
}

const object = {
    length: 5,
    method(callback) {
        callback();
    },
};

object.method(callback, 1, 2);
```

APNA COLLEGE

APNA COLLEGE

Array Methods

- forEach
- map
- filter
- some
- every
- reduce

01. Array Methods.mp4

JS

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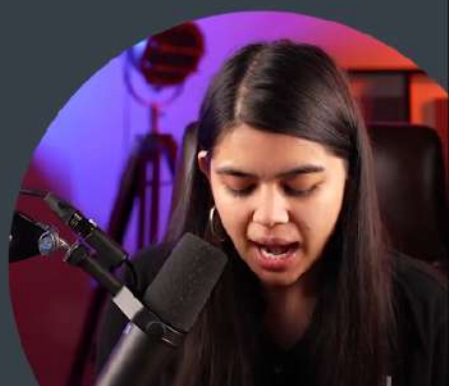
forEach

```
arr.forEach(some function definition or name);
```



JS

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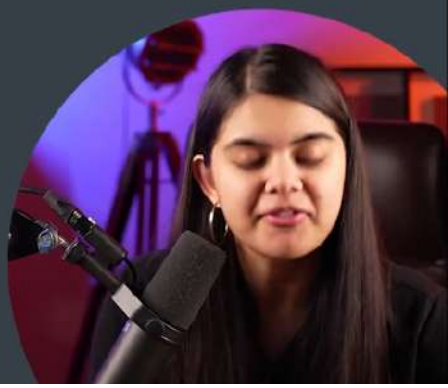
Map

let newArr = arr.map(some function definition or name);

```
let num = [1, 2, 3, 4];

let double = num.map(function(el) {
    return el*2;
});
```



02. Map _ Filter.mp4

JS

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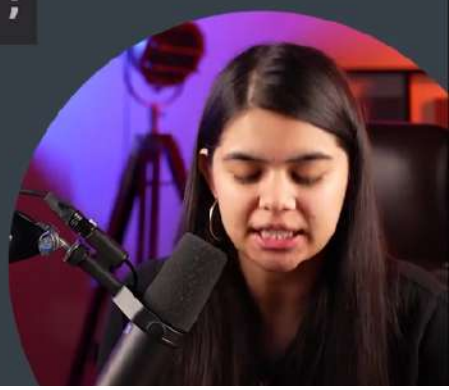
Filter

let newArr = arr.filter(some function definition or name);

```
let nums = [2, 4, 1, 5, 6, 2, 7, 8, 9];

let even = nums.filter( (num) => (num % 2 == 0) );
```



JS

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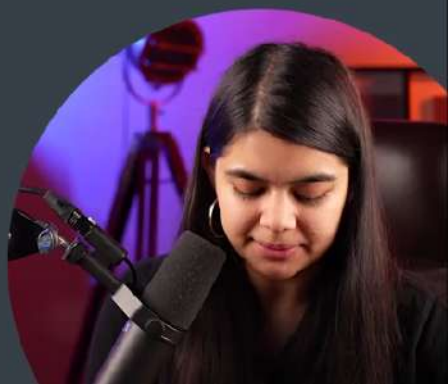
Every

Returns true if every element of array gives true for some function. Else returns false.

arr.every(some function definition or name);

```
[1, 2, 3, 4].every( (el) => (el%2 == 0));
false
[2, 4].every( (el) => (el%2 == 0));
true
```



[1,2,3,4,5,6]

single

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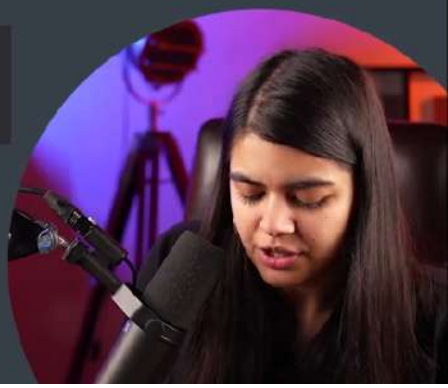
Reduce

Reduces the array to a single value

arr.reduce(reducer function with 2 variables for (accumulator, element));

```
[1, 2, 3, 4].reduce( (res, el) => (res+el) );
10
```



JS

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Default Parameters

Giving a default value to the arguments

```
function func (a, b = 2) {
   //do something
}
```

```
function sum(a, b = 3) {
  return a + b;
}

sum(2); //5
```

JS

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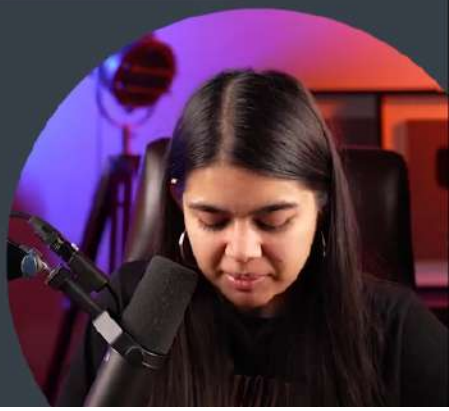
Spread

Expands an iterable into multiple values

```
function func (...arr) {
   //do something
}
```

```
> let arr = [1, 2, 3, 4, 5];
<· undefined
> Math.min(...arr);
<· 1
> console.log(...arr);
  1 2 3 4 5
```

```
> console.log(..."apnacollege");
  a p n a c o l l e g e
```



JS

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Spread

with Array Literals

```
> let arr = [1, 2, 3, 4, 5];
<· undefined
> let newArr = [...arr];
<· undefined
> newArr
<· ▶ (5) [1, 2, 3, 4, 5]
```

```
> let chars = [..."hello"];
<· undefined
> chars
<· ▶ (5) ['h', 'e', 'l', 'l', 'o']
```

JS

APNA COLLEGE

Spread

with Object Literals

```
let data = {
  email: "ironman@gmail.com",
  password: "abcd",
};

let dataCopy = { ...data, id: 123 };
```

10. Spread (Object Literals).mp4

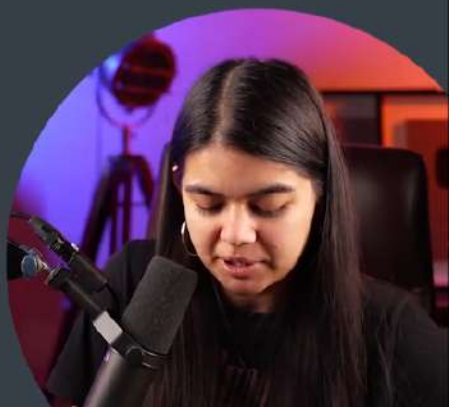
JS

APNA COLLEGE

Rest

Allows a function to take an indefinite number of arguments and bundle them in an array

```
function sum(...args) {
  return args.reduce((add, el) => add + el);
}
```



11. Rest.mp4

APNA COLLEGE

Destructuring

Storing values of array into multiple variables

```
let names = ["tony", "bruce", "steve", "peter"];
let [winner, runnerup] = names;
console.log(winner, runnerup); //"tony" "bruce"
```

12. Destructuring.mp4

JS

APNA COLLEGE

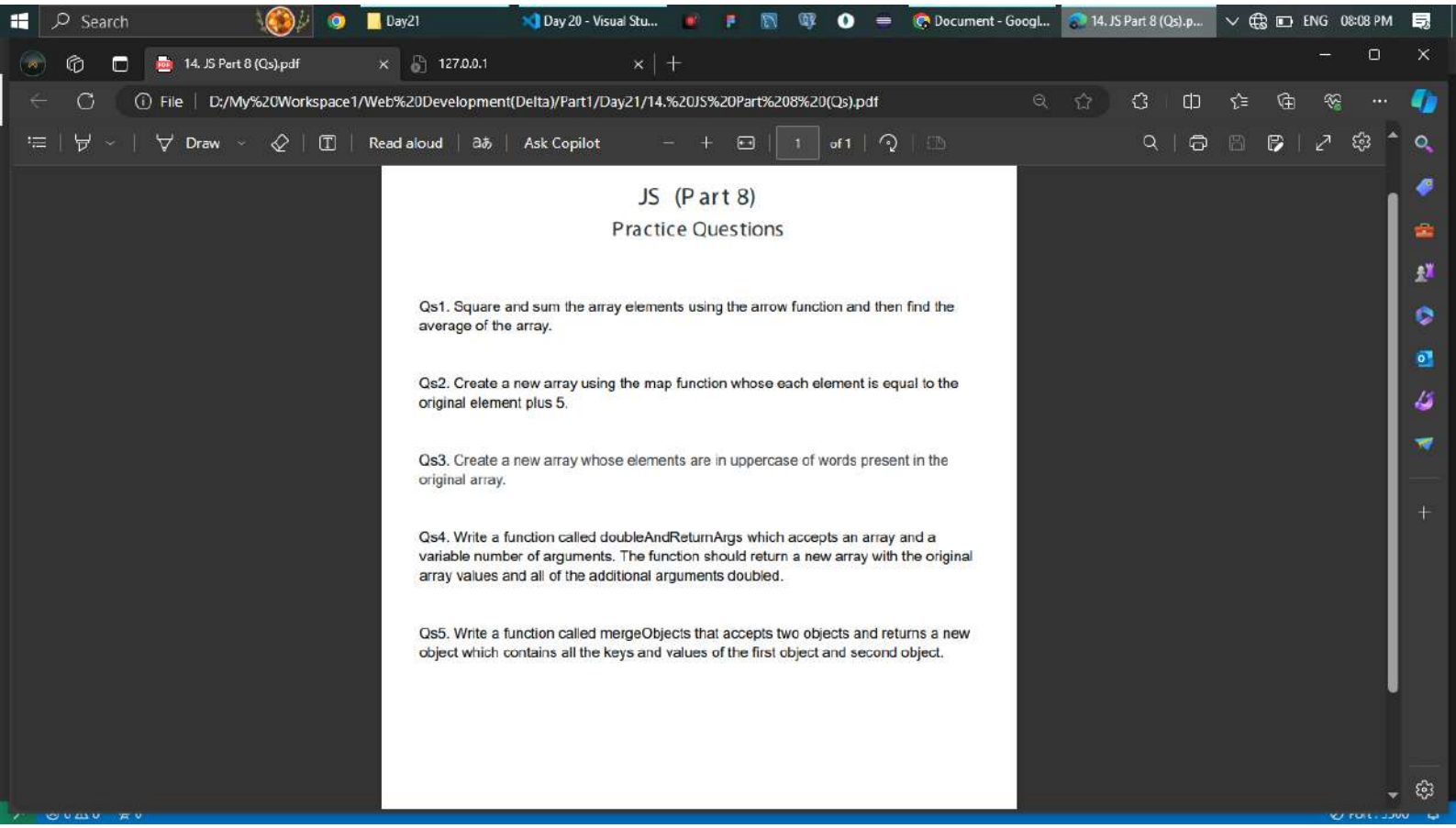
Destructuring

Objects

```
const student = {
  name: "karan",
  class: 9,
  age: 14,
  subjects: ["hindi", "english", "math", "science", "social studies"],
  username: "karan123",
  password: 1234,
};

const { username: user, password: pass } = student;

console.log(user); //"karan123"
```



JS (Part 8)

Practice Questions

Qs1. Square and sum the array elements using the arrow function and then find the average of the array.

Qs2. Create a new array using the map function whose each element is equal to the original element plus 5.

Qs3. Create a new array whose elements are in uppercase of words present in the original array.

Qs4. Write a function called doubleAndReturnArgs which accepts an array and a variable number of arguments. The function should return a new array with the original array values and all of the additional arguments doubled.

Qs5. Write a function called mergeObjects that accepts two objects and returns a new object which contains all the keys and values of the first object and second object.