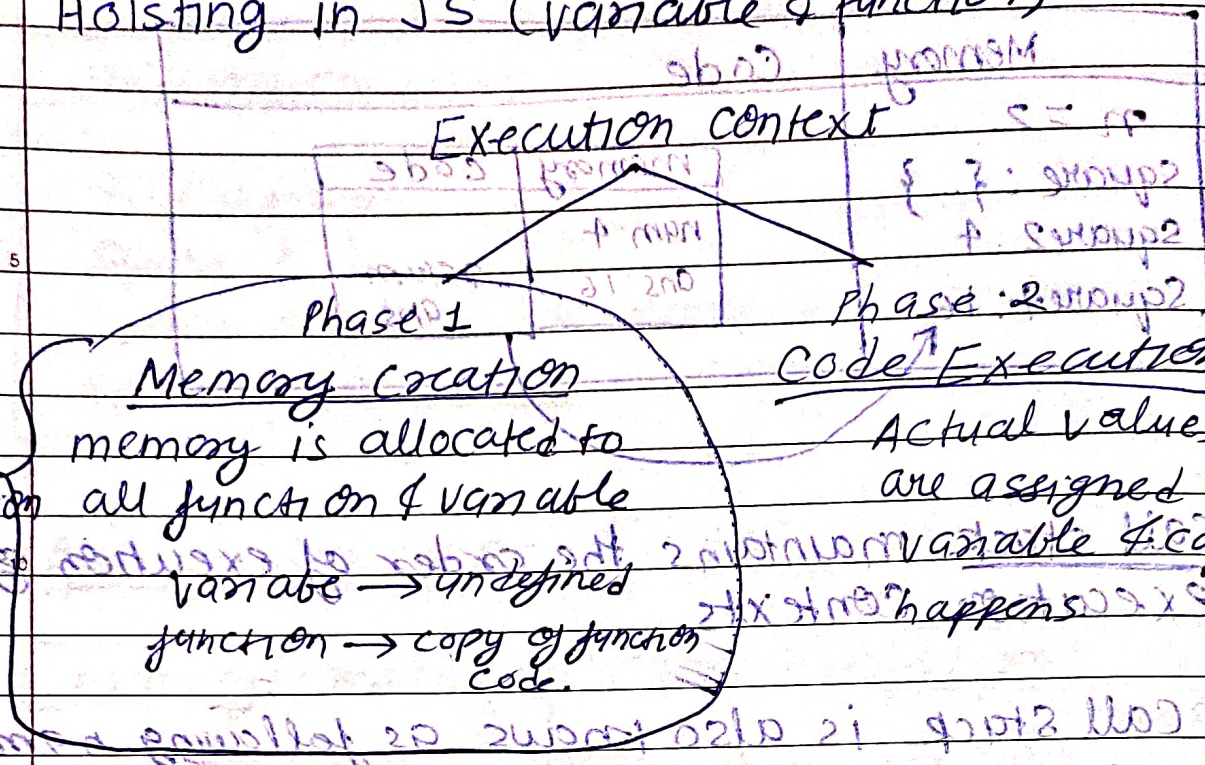
4 Video

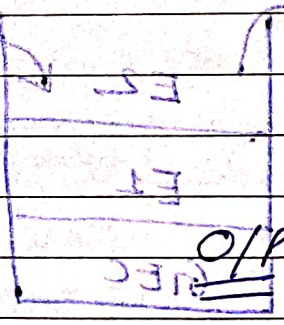
Hoisting in JS (variable & function)



Ex 1

```
var x = 7;
function getName()
{
console.log("Namaste JS");
}
getName();
console.log(x);
```

O/P
Namaste JS
7



Ex 2

```
getName();
console.log(x);
function getName()
{
console.log("Namaste JS");
}
var x = 7;
```

O/P
Namaste JS
undefined

Ex. 3

```
getName();
console.log(x);
console.log(getName);
function getName()
{
console.log("Namaste JS");
}
```

O/P
① Namaste JS
② Uncaught ReferenceError: x is not defined at index.js:2
③ getName() { console.log("Namaste JS"); }

undefined	Not defined
> memory is allocated but value is not assigned.	> variable is not present in execution context / program
> variable is present but is being accessed before value is assigned to it. [only memory allocation phase is done & code execution for that variable is not over yet]	> No memory is allocated to that variable.

* Before Actual code execution memory is allocated to all variables and function in memory creation phase of Execution context.

Ex 4.
```
getName();
console.log(x);
console.log(getName);
console.log(getName2);
var x=7;
var getName = () => console.log("Namaste JS");
function getName2(){
    console.log("Hello JS");
}
```

* Arrow function syntax act as variable in memory creation phase.

O/P

```
invalid or unexpected token
undefined
undefined
getName2(){ console.log("Hello JS"); }
```