★ === vs == :

★ != , == (loose)

★ !==, === (strict) (DT, value)

★ 1 === "1" ⇒ false

① check values (1 == 1) ⇒ true

② check datatypes (N == S) ⇒ false

=== is "true" when both values and datatypes are same otherwise it is false.

★ 1 !== "1" ⇒ true

① check values (1 != 1) ⇒ false

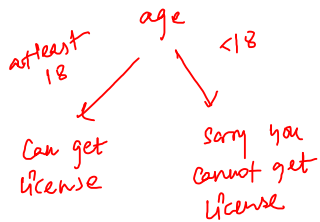
② check datatypes (N != S) ⇒ true

!== is "false" when both values and datatypes are same otherwise it is true.

9:05 PM - 9:20 PM

BREAK

* If - else statements :

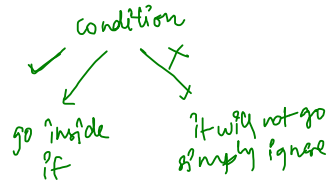


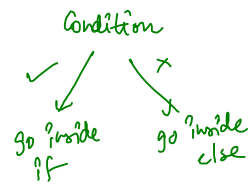
→ we have to take decision based upon some values / variables

→ control structures (It is handling the flow of program)

```
* if (condition) {
    /* block of code */
  }
  else {
    /* block of code */
  }
```

```
* if ( condition ) {
    /* block of code */
  }
```





★ Experimenting with if-else :

```
367  const day = "wednesday";
368  if (day == "monday") {
369    console.log("I have to go for a doctor appointment");
370  }
371  if (day == "monday") {
372    console.log("I have to go for shopping");
373  }
374  if (day == "tuesday") {
375    console.log("I have an exam");
376    console.log("I have a weddding to attend");
377  } else {
378    console.log("I dont know what to do");
379  }
```

```
367  const day = "monday";
368  if (day == "monday") {
369    console.log("I have to go for a doctor appointment");
370  }
371  if (day == "monday") {
372    console.log("I have to go for shopping");
373  }
374  if (day == "tuesday") {
375    console.log("I have an exam");
376    console.log("I have a weddding to attend");
377  } else {
378    console.log("I dont know what to do");
379  }
```

```
367  const day = "monday";
368  if (day == "monday") {
369    console.log("I have to go for a doctor appointment");
370  } else {
371    console.log("I dont know what to do");
372  }
373  if (day == "monday") {
374    console.log("I have to go for shopping");
375  }
376  if (day == "tuesday") {
377    console.log("I have an exam");
378    console.log("I have a weddding to attend");
379  }
```

```
367  const day = "tuesday";
368  if (day == "monday") {
369    console.log("I have to go for a doctor appointment");
370  } else {
371    console.log("I dont know what to do");
372  }
373  if (day == "monday") {
374    console.log("I have to go for shopping");
375  }
376  if (day == "tuesday") {
377    console.log("I have an exam");
378    console.log("I have a weddding to attend");
379  }
```

→ Always an else is attached with nearest if, you can have as many if statements you want without any else, but you cannot use else without an if statement.

★ else - if :

```
const day = "abcdef";

if (day == "monday") {
  console.log("Plan course structure");
} else if (day == "tuesday") {
  console.log("Prepare for exams");
} else if (day == "wednesday") {
  console.log("Write examples for coding lectures");
} else if (day == "thursday") {
  console.log("Watch recordings");
} else if (day == "friday") {
  console.log("solve assignments");
} else if (day == "saturday") {
  console.log("Revise all notes");
} else if (day == "sunday") {
  console.log("attempt contest");
} else {
  console.log("Please enter a valid day");
}
```

"thursday"

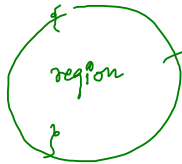
→ works as else but it has a condition associated.

* Basics of Scope :

```
// scope
const birthYear = 1998;
if (birthYear <= 2000) {
  let century = 20;
} else {
  let century = 21;
}
console.log(century);
```

→ century variable is created inside if-else statements hence it is available in those regions only.

```
// scope
const birthYear = 1998;
let century;
if (birthYear <= 2000) {
  century = 20;
} else {
  century = 21;
}
console.log(century);
```



→ variables created in this region are not accessible outside.

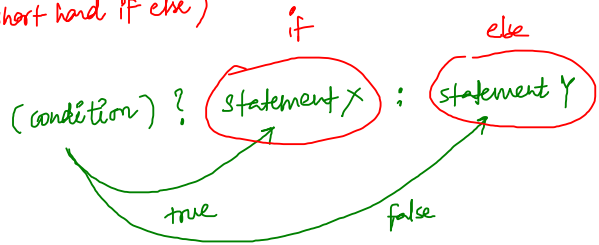
→ when JS doesn't know about some variable it gives "Reference Error": Not defined

undefined vs not defined

- undefined → variable is empty (it is a value)
- not defined → variable itself is not created

* Ternary operator :

(short hand if else)




```
411  // Ternary operator
412  const age = 22;
413  if (age >= 21) {
414    console.log("You can drink alcohol");
415  } else {
416    console.log("You cannot drink alcohol");
417  }
418
419  age >= 21
420    ? console.log("You can drink alcohol")
421    : console.log("You cannot drink alcohol");
```