\*\*\*Conditions (if / switch / ternary )\*\*\*

1. **if statement:**

if statement is conditional statement which is use to check the condition.

Ex=>let age=22;

if (age>18) {

console.log("You are eligible for voting");

}

else{

console.log("You are not eligible for voting");

}

**2)Comparison Operators:**

Comparison operators are used in logical statements to determine equality or difference between variables or values.

1. == ‘Equal to’ operator which is used to assign the valueto variable.
2. === Triple equal to operator is used to check whether the value as well as data type too.
3. != Not equal to
4. !== not equal value or not equal type
5. > Greater than
6. < Less than
7. >= greater than or equal to
8. <=less than or equal to

**3)nested if condition:**

Nested if statement means an if statement inside an if statement

let weather = "raining";

let vehicle = "";

if (weather === "raining") {

if (vehicle === "bike") {

console.log("wear raincoat");

} else if (vehicle === "car") {

console.log("don't worry");

} else {

console.log("take umbrella");

}

} else if (weather === "summer") {

if (vehicle === "bike") {

console.log("wear sun glasses");

} else if (vehicle === "car") {

console.log("don't worry");

} else {

console.log("take umbrella");

}

}

**4)AND, OR, NOT Operator:**

**i)AND:-** Logical and operator returns true if both conditions are true.

Ex=>if (weather === "raining" && vehicle === "bike") {

console.log("take raincoat");

}

In given example if both conditions are then result is true otherwise false.

**ii)OR:-**Logical oR operator returns true if at least one condition is true. If both conditions are true is also valid but at least one condition must be true.

Ex=> if (weather === "raining" || vehicle === "bike") {

}

**iii)NOT:-** An operation on logical values that changes true to false, and false to true.

**5) Switch statement:**

The switch statement to select one of many code blocks to be executed.

Ex=> const user\_type = "employee";

switch(user\_type) {

case "admin":

console.log("User is admin")

break;

case "manager":

console.log("User is manager")

break;

case "student":

console.log("User is student")

break;

case "teacher":

console.log("User is teacher")

break;

case "hod":

console.log("User is hod")

break;

default:

console.log("User is different, not in list");

}

**6)for loop:**

Loops can execute a block of code a number of times.

Ex=> const marks\_array = [90, 80, 12, 34, 56, 74, 65];

for (let i=0; i<marks\_array.length; i++) {

console.log("mark is ", marks\_array[i]);

}

**7)Ternary Operator:**

The **conditional (ternary) operator** is the only JavaScript operator that takes three operands: a condition followed by a question mark (?), then an expression to execute if the condition is true followed by a colon (:), and finally the expression to execute if the condition is false.

Ex=> const marks = 30;

let is\_result = (marks > 40) ? "passed" : "failed";

console.log(is\_result);

**8)break statement:**

The break statement jumps out of a loop.

Ex=> const marks\_array = [90, 80, 12, 34, 56, 74, 65];

for (let i=0; i<marks\_array.length; i++) {

if (marks\_array[i] < 40) {

break;

}

console.log("Passed ", marks\_array[i]);

**9)continue statement:**

The continue statement breaks one iteration (in the loop), if a specified condition occurs, and continues with the next iteration in the loop.

Ex=> const marks\_array = [90, 80, 12, 34, 56, 74, 65];

for (let i=0; i<marks\_array.length; i++) {

if (marks\_array[i] < 40) {

continue;

}

console.log("Passed ", marks\_array[i]);