Problem Solving - If else

Friday, 22 July 2022   8:12 PM

For

3 Properties
↳ While loop:-
✓ 1. Initialization
✓ 2. Condition
✓ 3. Incr / Decr

Syntax:-
① // Initialization
while (condition) ②
{
  // body of the loop.

③ Incr/Decr   I 2

E.g: Print 1 to 5
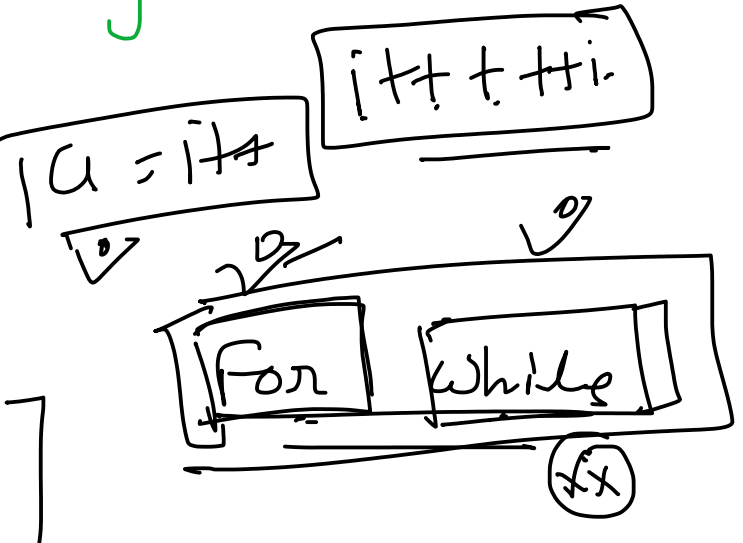   0 to 5

```
var i = 1;  ①
while ( i <= 5 ) {   ②
  console. log(i);
  i++;  ③      -- 1
}
```
+i

5
4
3
2
✓

i--;

```
var i = 5;
while ( i >= 1 )
{
  console.log(i)
  i--;
}
```

i++ + ++i

i > 0;   i >= 1;   a = i++
1   i = i++

For   While
      xx

what is the time ?
Eng.   Hindi

```
var sum = 0;  ①      ②          ③
for(var i=0,j=0; i<10 & j<10; ++i,j=i+2){
  console.log(i);
  console.log(j);
  sum+=i;   // sum = sum + i
}
console.log(sum);
```

Sum

∅ 0

i

∅ 1

&&} =>   0 0

j

∅ 3

a = 2   b = 5   ③

x -x 1

true   6-18
                  0 b   any of
And &&   I/P true
a && b   O/P   I/P   ↳ true
  I/P   O O   O
& &&   O O   O   O 1
↳ logical   O O   O   O
bitwise   1 O   (O)   1 O
&   O 1   O
             1 1   1   1 1

for while }   foreach
Email OR mobile
And { Email
     Password   And} =>
                     & OR} =>

Revise

Extra

Timing &
money

basics

1 - 2

1 → x hrs

Theory → 2x hrs

8 m
10 mm

Javascript

11PM → 2u

1 AM

Geeks for Geeksy
W3 Schools
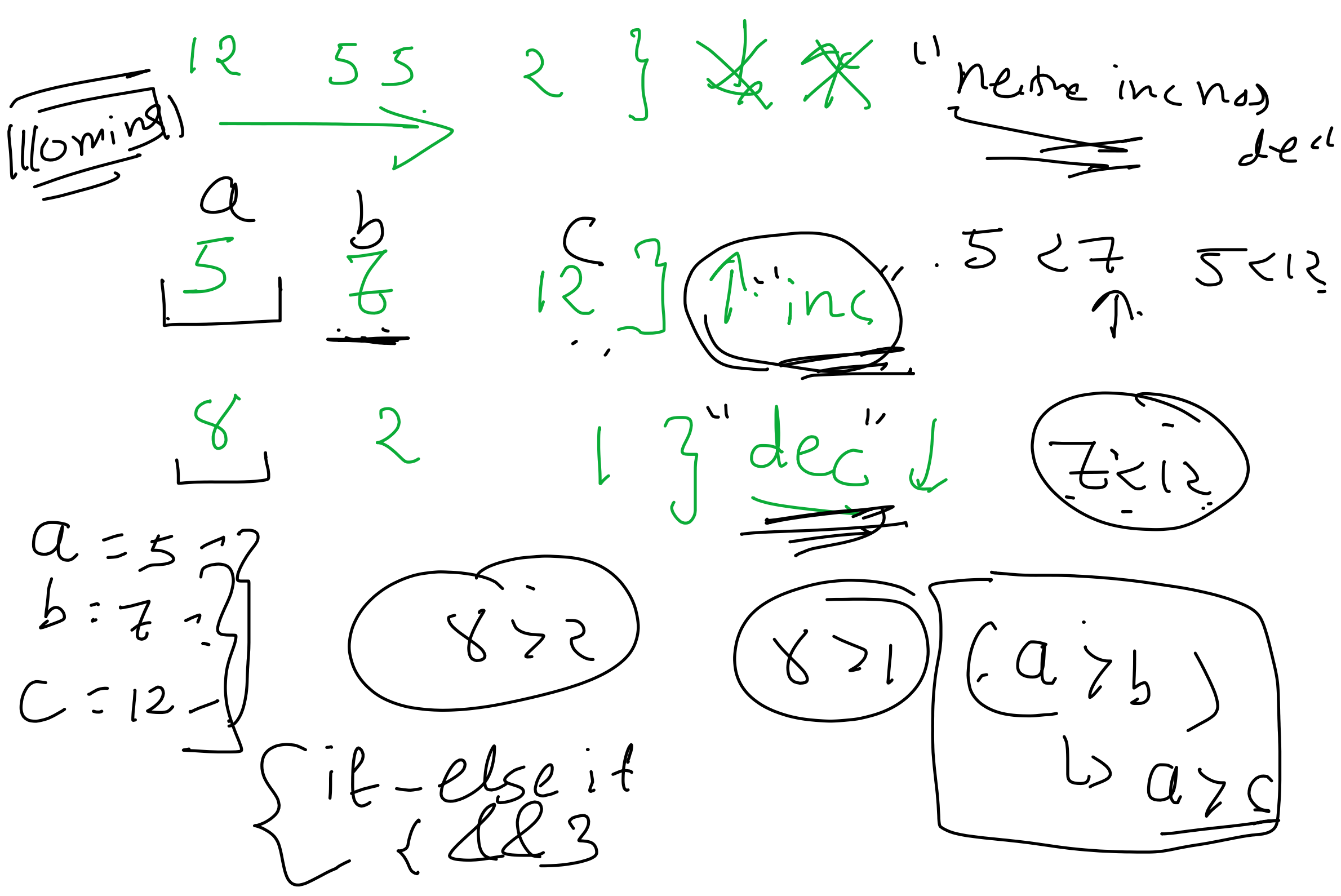
Variables
Datatypes

MON

___
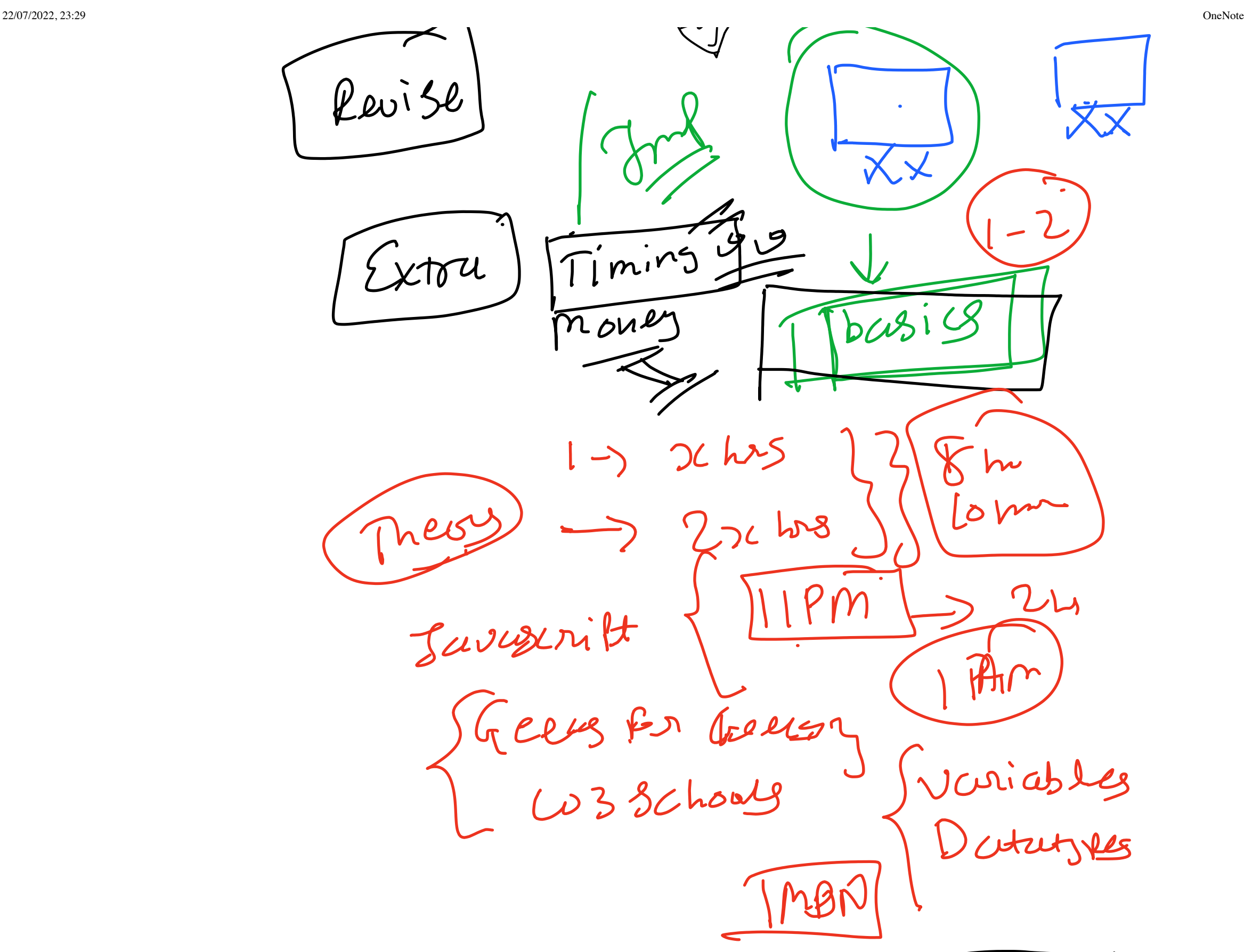
Jump Statements :-

→ 1. break; } loops :-

2. continue; }

s the output of this question?

```
var i,j;
for(i=1;i<=2;i++){
    for(j=1;j<=2;j++){
        if(i==j){
            continue;
        }
        console.log(i,j);
    }
}
```

12   5 5   2 }   "neitre inc nos dec"

(1(oming))

a   b   c
5   7   12 } "inc"   5 < 7   5 < 12

8   2   1 } "dec" ↓   7 < 12

a = 5 -7
b = 7 -3
c = 12 -

8 > 2   8 > 1   (a > b)
    ↳ a > c

{ if - else if
{ && 3

Increasing or Decreasing Order

Problem – Given three numbers. Your task is to check the order of three numbers. If they are in increasing order, print "Increasing order". If they are in decreasing order, print "Decreasing Order" else print "neither increasing or decreasing order"

For example –

Input – 12, 45, 87

Output – Increasing order

12   5   87   87   45   12

Approach – Since this problem is based on condition, we can go with the If else block.

Steps -

1) Take three numbers as input a,b,c
2) If a>b and b>c - print "Decreasing order"
3) If a<b and b<c - print "Increasing order"
4) Else print "Neither increasing or decreasing order"

Grading System

Problem – Given a number as a score of the student. You need to assign the grade to the student based on the score

Grading system followed -

90 and above	A
80 to 89	B
60 to 79	C
33 – 59	D
below 33	F

Intuition - As per the grading system, we will assign the grade to the student using conditional statement - nested if-else ladder

Steps -
1. Take input score
2. Initialize grade
3. Implement a nested if-else ladder to find the grade based on the value of score

var marks = 93

60

$$>= 90 \to \text{(A)}$$
$$80 - 89 \to B$$
$$60 - 79 \to C$$
$$33 - 59 \to D$$
$$< 33 \to F$$

M → total no. of sessions → 100

N → attended no. of session → 30   80

m → 75% ⇒ 75   75
− 30
45

N < M → 75% → sit

logic

80%

10% CodeXX

10% testing

→ room

```
function checkAttendance(m,n){
  if (n/m >= .75){
    console.log("75% attendance already
achieved")
  }
  else{
    console.log("You don't have minimum
attendance. You need", Math.ceil((.75*m)
-n), "more days")
  }
}

checkAttendance(10,6);
checkAttendance(20,17);
```

$$\left(\frac{n}{m}\right)$$

3.33

$$\frac{10}{3}$$

.75   0.75