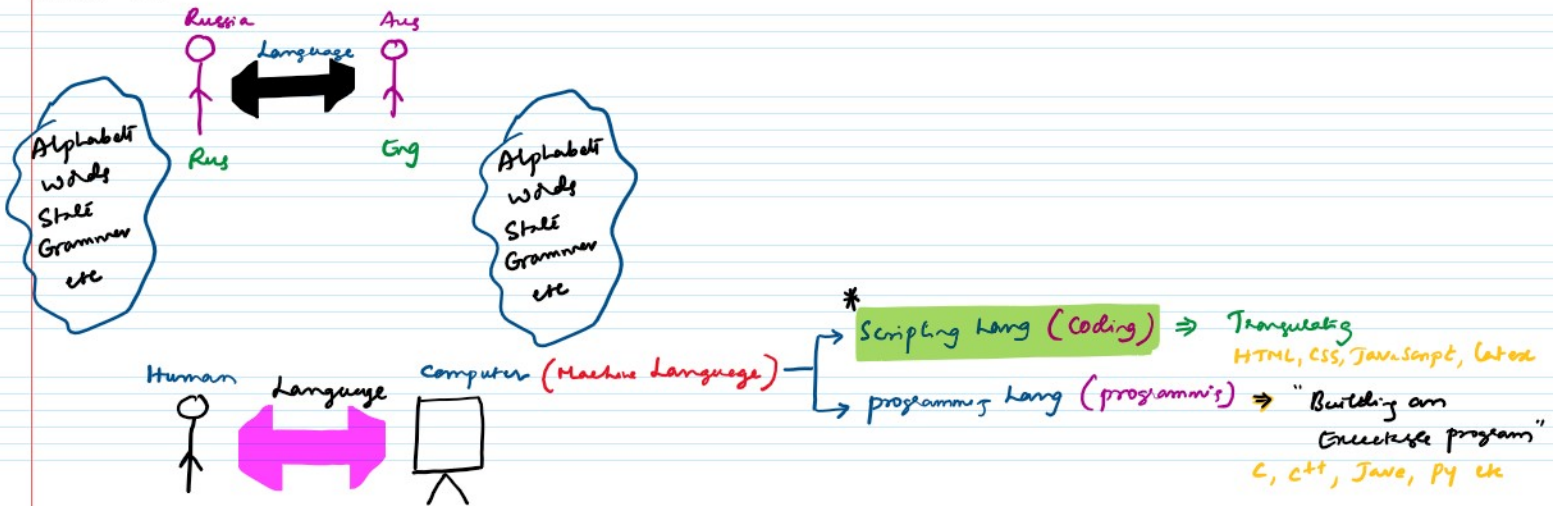
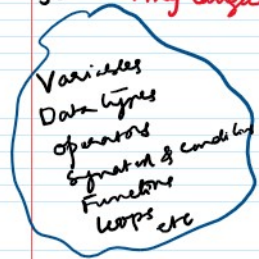


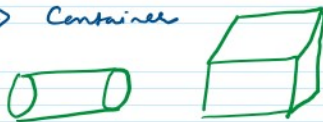
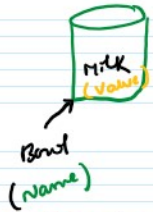
Code Foundations



JS Any language



* Variable ⇒ Container



$x = 25$; $y = 'c'$ $z = \text{"chaitanya"}$

Data types :-

integer $x = 25$; char $y = 'c'$ String $z = \text{"chai"}$

$x = 'c'$;

let var $x = 25$; $y = 'c'$

operators :-

$p = 25 + 15 = 40$

$25 + 'c'$

$p = 'c' + 'd'$
 $= cd$

Arith Logical Comparisons Shifting

$+$, $-$, $*$, $/$

AND, OR, NOT

$\{0, 1\}$, $\{F, T\}$, $\{No, Yes\}$

$() = ()$ $() \leq ()$
 $() \geq ()$

$x >> 1$;

$x = y$;

$x = 15$; $y = 25$

$x == y$;

$x = 25$

$15 == 25 \times \Rightarrow \text{False}$

$+15$

+15

$\{0, 1\}, \{F, T\}, \{No, Yes\}$

$x = y; \quad x = 15, y = 25$
 $x == y; \quad x = 25$
 $15 == 25 \times \Rightarrow \text{False}$

$T \text{ and } F = F$
 $F \text{ and } T = F$
 $T \text{ and } T = T$
 $F \text{ and } F = F$
 $T \text{ or } T = T$
 $T \text{ or } F = T$
 $F \text{ or } T = T$
 $F \text{ or } F = F$

$x \gg 1$

$x = 010110$

$x \gg 1$

001011

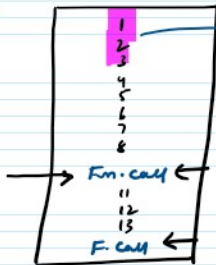
$25/2 \gg$

$x \ll 1$

function add
 $c + d$
 $\}$

Fun chors:-

Reuse)



Function

$x = 25$
 $y = 15$
 $x \oplus y$

~~$P = 20, Q = 30$~~
 ~~$P + Q$~~

b.add

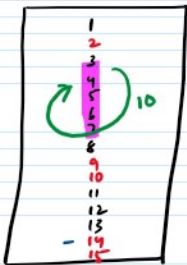
~~$a = 500, b = 200$~~
 ~~$a + b$~~

b.add

2/4:-

while, For, Foreach

repeat



$i = 0$

$i = 0 + 1 = 1$

$i = 1 + 1 = 2$

$i = 2 + 1 = 3$

$i = 3 + 1 = 4$

$i = 4 + 1 = 5$

$i = 0; \quad i \leq 5$
 $\text{while } (i \leq 5)$

$\{$

print("chart")

$\}$

$i = i + 1;$

$0 + 1$

$1 + 1 = 2$

chart

chart

chart

for ($i = 0; i < 5; i++$)
 $\{$
 print("chart")
 $\}$

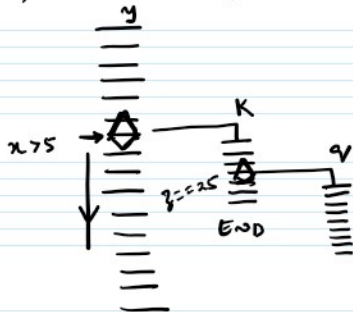
Foreach;

Case (x)

0 : $\equiv \equiv \equiv$

1 : $\equiv \equiv \equiv$

Conditional Control Flows:-



List:-

$x = 25;$

charlanya = [A, n, c, L];

↑

Array



]

$x_1 = 25; \leftarrow \text{Single}$

$x_2 = [25, 'c', "SFD"];$

Multiple value

$$\begin{array}{l|l}
 x = 10 & y = 15 \\
 z = x + y \Rightarrow 25 & \\
 z = 25 &
 \end{array}
 \begin{array}{l}
 x = T \quad y = T \\
 z = x \text{ and } y = T \\
 z = T
 \end{array}$$