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Earning, Freelancing

Coding

COMPUTER COURSES

* GBOB (Chrome)
* Affiliate Marketing (Amazon)(Daraz) etc.
* Web development:
  - → Coding
  - → Wordpress
* Android app development (Android Studio)
* Mobile app development
* Graphic Designing (Ai, Ps, Id, Corel draw)
* Video editing (Pr, Ae)
* Audio editing (Au)
* Composing (Data entry)

"Visual Code Installing & Live Server+Shortcut Setting"

* Visual Studio (VS)
→ It is a free coding software.
→ It is recommended for Web development and app development by different languages such as python.
→ Its benefit is that it gives suggestion, make the tag closed automatically.
"Which makes our work easier and faster."

* First of all "shortcuts" will be set according to our regular shortcuts and usage to make in your work. and server installation:-
→ Ctrl + D (to copy the line in next row)
→ Ctrl + / (besides shift key) (to add comment which will not be executed by the server.
→ Ctrl + S (to save the file) or (setting can be settle as autosave)
→ Alt + z toggle word wap.
→ ~~Ctrl~~ Shift + Alt + F format page.

* "Live server" is installed to view your result in browser quickly on saving the coding file.

→ To come out a folder (..) double dot is used.

→ Front End: (ONLY Front End : Static Web)
i) HTML, CSS, Javascript

ii) Back End: (F.E + B.E : Dynamic Web)
Php → My SQL, Nodejs → Mongodb
→ flask/django :→ SQLite

* HTML, CSS, JS, php, nodejs,
* Python => django/flask,

* Code pen

Backup:
Email: webcode backup@gmail.com
Password: Develop and backup.

HTML Text Decoration Tag

* Italic ⇒ em
* Bold ⇒ strong
* Underline ⇒ u
* to do cutting ⇒ s

" To create dead links '#' is use in "href" attribute."

" To form image a link use it in <a> tag."

HTML

Basics and Startups

* ! + Enter (Emmet Abbrivation)
* <Head> (tag includes) 3 things:-
  → Meta information
  → <Title> Abu Hurairah </Title>
  → Url links of ".css" and "javascript" ".js" etc
  (to combine file and complete website)
  (Head tag involves meta tags, titles, url links of "js." and "css"
  </Head>
* <Body>
  ~~</Head>~~

→ Meta tags:
Meta name=Description content ——
Meta name=keywords " —— (SEO)
Meta name=Robots " (Index, Follow)

→ To include ⇒ external css → link: css
⇒ extenal javascript → script src

Text → heading tags h1 → h2, h3, h4, h5, h6 → Smaller Sizes.

→ * ⇒ bold ⇒ Italic

Line break →
 line break

→ <hr> to produce a line. "——"

Web Links → Ctrl + enter to jump in next line

→ <a> - to make links in your web.
* href="link", target="_blank" → to open the link in new tab.
* can also be used to jump into diff. sections of pages. with # id.

Img Add → <Img: src="" alt="text" width="" height "" >

List

Lists and Tables ③

 type → circle, disc, square.
→ Unordered lists.
 ----

type → i, I, a, A

 → ordered lists

Tables

<thead> → table head.
<tr> → table row.
<th> --- </th> → table heading
</tr>
</thead>
<tbody> → table body.
<tr>
<td> --- </td> → table data
</tr>
</tbody>

Inline & Block Element.

-- → block
-- → inline

→ Block ⇒ ul, li, div
→ inline ⇒ em, img.

* Input tag has NO closing tag.

* required is written in the "input" tag than it means it is important.

* For RADIO BTN

<Input Type="radio" name = "S">

<label for = "I">I</label

<form action=" " → Backend >

Input taken by user (4)

<Input type = " "> → text → Date → radio → textarea → clms → row
→ nmbr → checkbox → email.

— <Input type = "radio" name = "same"> —
<input type = "radio" name = "same">

  to make other input on next line.

<label for = "s" >
<input type = " " id = "s" > {To make selection by clicking on the text.

<Label for = "s" >
<Select name = "my car" id = "s" >
<option value = " " > --- </option>
<option value = " " > --- </option>.
↳ selected to select the value of one

<Button> contact us </Button>

"Ids AND Classes"

"." is use for class.
"#" is use for Id.

HTML Entities:

→   to make more spaces than one.
→ <p> to print <p> in your web.
→

Semantic Tags

Selector { Property : Value }

P { colour : BLUE; }

header tags. Paragraph with class intro.

header, p.intro { Background-color: red;
Border-radius: 3px;
}

Group of selectors

Declaration block

⇒ Selector types
* CSS element selector → Select tags
* CSS id selector → select an id
* CSS class selector → select a class
* CSS grouping selector.

FONT Design

→ Font family ; font design.
→ font size ; 0px ∵ 1px = (1/96 th) inch
→ Line-height ; 0 em
(Line-spacing)
→ Font-weight ; "bold"
→ font-style ; "italic"

COLOURS IN CSS

(WWW.HTMLcolorcodes.com)

Color : Name
Color : RGB value. (0, 0, 0).
Color : #ffffff value.

BORDER

Border ; size solid color.
→ Border can be indivually set, by
✓ Border-top etc.
→ To make border corners ~~radius~~ round.
✓ Border - radius = 0px,
→ for in divisual.
✓ Border-top-left-radius etc.
→ Border ~~size~~ color : "Name" Ya "RGB"
→ Border Style : solid;
→ Border width : 0px.
→ Border : none;

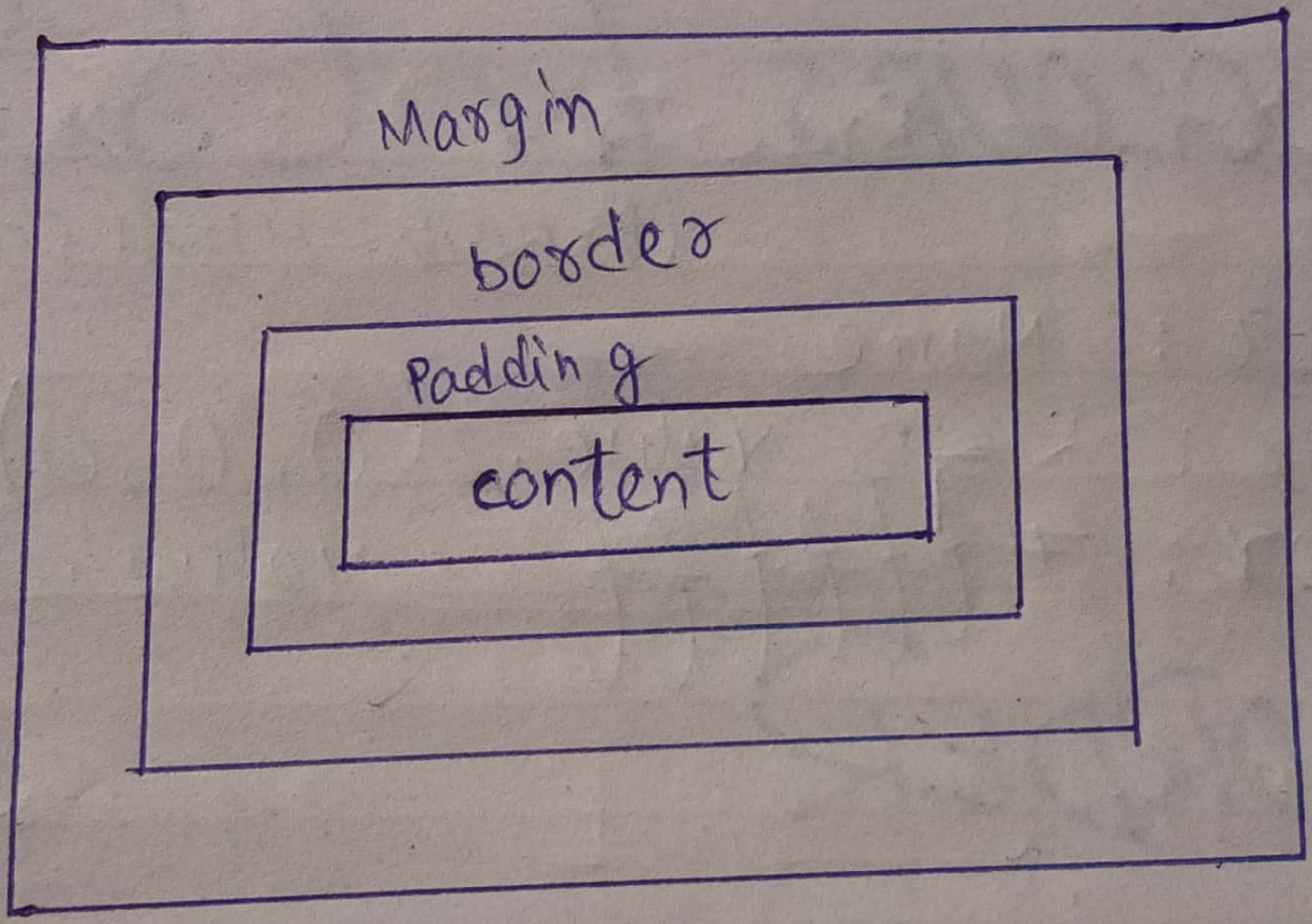


Fig: Box MODEL

BACKGROUND:

- Background-color:;
- Background-height;
- Background-width;
- Background-image; url(' ');
- Background-repeat; no repeat, repeat x repeat y.
- Background-position: centre-centre.
  (x) (axis) (y) (axis)

BOX MODEL:

Margin, Padding:-

- Margin: 0px.
- Padding: 0px.

(They can be set left, right, top and bottom seperatly)

- Padding y(top/bottom) x(left/right)

- Box-sizing; border-box.
- * { } to set by defaul values. for all elements.

CSS Reset

FLOAT Property:

→ Float : left; "left, right"
→ Clear : left/right; "to remove the overright of float
→ Width : % [%, px.]

Designing a button:

→ cursor : pointer;
→ <Button> contact us </Button>

→ text decoration : none; "to remove underline or other properties."

Pseudo Selector:

→ a:hover { } "This property is used to change something when you move cursor to content."
→ a:visited { } "To show visited site sepezatly"
→ a:active { } "When clicked on it changing occurs."

Also on pg #12

NAVIGATION BAR

→ list styling : none; "to remove bullets".

```
<header>
    <nav class=" ">
    <ul>
        <li>  <li>
    </ul>
    </nav>
</header>
```

* "Float property will be use to float the elements in the list"

→ Then Bg-color will be removed this is because when float property is used then the element overflow from parent element. To accomodate this problem we have to target <ul> in the markup

→
{overflow : auto;}

CSS DISPLAY PROPERTY:

→ Header is a block element.
→ And it does not works with "margin: auto;" (to centre the element).

* Display can be block, inline or inline-block.
→ Opacity: 0.

Position Property:

(it will leave a gap if relative is used).

→ Relative: relatived to the elements position.
→ Absolute: relative to the parent element
→ Fixed: relative to browser's window.
→ Sticky: To stick an element.

VISIBILITY:

→ visibilty: hidden "to reserve element space on hidding it"
→ Display: none "to not reserve space for element on hidding it."

Z-INDEX: "it will work only when two objects are overlapping and "position property" is used."

→ Small value will move the element to back.
→ Big value will move the element to front.

FLEX BOX:

Flex container

Flex item.

Display: Flex;
x-axis ⇒ main-axis
y-axis ⇒ cross-axis

Just make sure that the "display: flex" is formed/made of "CONTAINER".

CONTAINER PROPERTIES.

Flex-direction: row/colomn; (row-reverse/colomn-reverse)
Flex-wrap: ; (no wrap; wrap), wrap-reverse)
flex-flow: (flex-direction flexwrap) shortcut to add flex-diection, flex-wrap along same).

Justify content: ; (centre, space-between, space-evenly, space around
→ Horizontally centre.

Align-items: centre; (flex-start, flex-end, stretch)
↳ Vertically centre (vertically centre)
↳ vertical even space between elements.

Item-Properties:

Order: ; higher the order later the element will show.
Flex-grow: ; to increase the width of item
Flex-shrink: ; to decrease the width of item
Flex-Basis: ; (when flex-direction is set to row it will controll width)
or vice versa.
align-self (flex-start, flex-end, centre)

Responsive Design

UNITS:

rem: ; it resize with html font size.
em: ; it resize with parent element. but element's padding or margin will be added with respect to the font-size set.

Media Queries

selector

@media (min-width: ...px) and (max-width: ...px){ }

If min-width is not mentioned Then min-width = 0px.
If max-width is not mentioned then max-width = ∞ px.
→ Media-queries are set at the last or after the classes on which we have to set it.

Selectors:

div > p {if "p" is right inside "div"}
div + p { if "p" is right after "div" }
Input [Type = " "] { }
a [target] { } , a [target = " "] { }
This will apply css to the number
Li:nth-child ( )
→ any number.
→ odd, even
→ (xn+y) where 'x' and 'y' is sent by develpor.

Before and After:

header :: before {}
header :: after {}

Text and Box Shadows

→ Box-shadow: x px y px; | if x and y are +ve then shadow will be right and down.

→ Box-shadow: x px y px blur-radius colour of shadow;

→ Box-shadow: x px y px blur-radius spread-radius colour of shadow.

* colour can be written as RGBA {a, b, c, d}
* in-set property will be used to form the shadow inside box.

→ text-shadow: x px y px colour;

* Also, it is same with the Box shadows.

CSS VARIABLES:

To set a variable,

→ --variable-name : variable-value;

To use variable,

→ ~~Set~~ margin : var(variable-name).

To set use variable any where we have set it in:

:root { }

ANIMATIONS / KEYFRAME.

→ Animation-Name: ;
→ Animation-Duration: ;
→ Animation-Itration-count ; ;
@ keyframes Animation-name {
from { }
to { } }

→ Animation-fill-mode: ; → forward (to stop at the last), alternate (to stop at the start).
→ Animation-timing-function: ; ease-in, ease-out, ease-in-out
→ Animation-delay: ; 0s (to delay the animation.)
→ Animation-direction: ; → alternate, reverse.

@ key-frame Animation-name {
0% { }
25% { }
75% { }
100% { }

→ animation: animation-name animation-duration animation-timing-function animation-delay animation-iteration-count animation-fill-mode;

grid-gap-row: ;

grid-gap-column: ;

grid-gap: 0px; to make every side same.

Short hand.

grid-gap: grid-gap-row grid-gap-column;

grid-gap: 0px 0px;

TRANSITION:

→ transition-property: ;
box:hover { }

→ transition-duration:;
→ transition-Timing-function:;
→ transition-delay:;

Transition:
transition-property
transition-duration
transition-delay
transition-function.

→ transition: property duration timing-function delay;

CSS TRANSFORM.

To move.

→ Transform: ; Rotate, skew, scale( ), translateX, translateY, translate(x, Y)

CSS GRID:

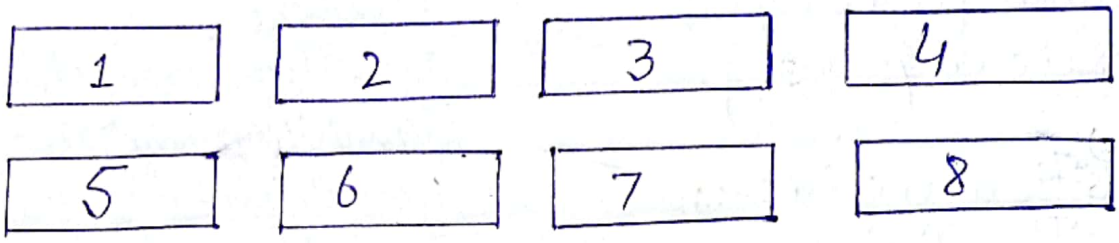
Display: grid;
grid-template-columns: 300px 100px 100x;
(1st column width, 2nd column width, 3rd column width)

It can be used with unit "fr" to form ratios.

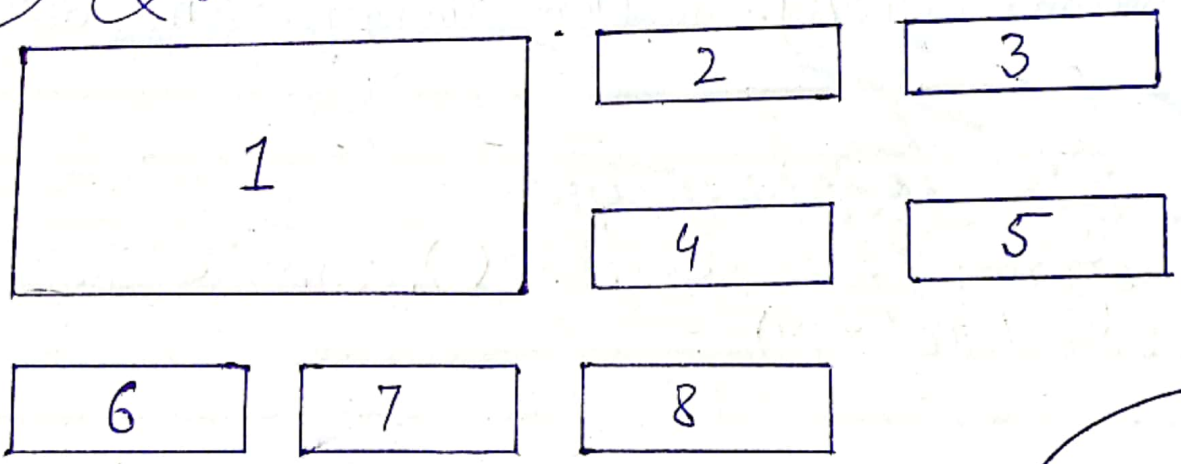
grid-template-columns: repeat(times, value)
grid-gap: 0rem; spacing between elements.

grid-template-rows: ; → selected rows
grid-auto-rows: 2fr; → all the other rows.

From:



To:



→ align-items: start / center / End ; (vertically for all)

→ align-self: start / center / End ; (vertically for one)

→ justify-items: start / center / end ; (horizontally all)

→ align-self: start / center / end ; (horizontally one)

---

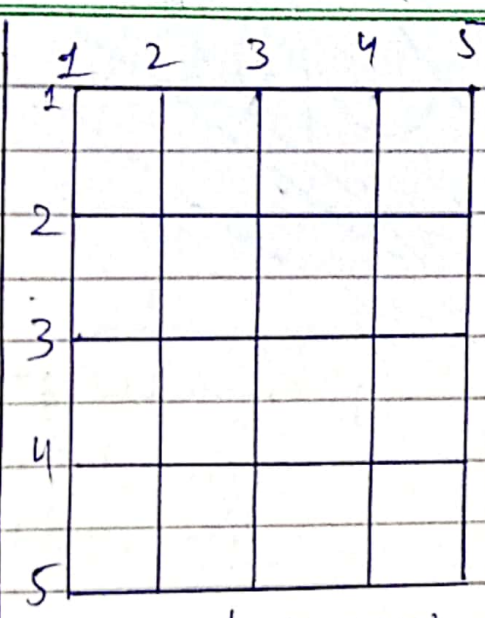
grid-template-area: val ; (one element)

GRID SPANNING.

→ Grid-row-gap: ;
→ Grid-column-gap: ;

→ class/Id: first child {
grid-column-start: 1;
grid-column-End: 3;
grid-row-start: 1;
grid-row-End: 3; }

Short hand
→ class/Id : first child {
grid-column: 1 /span 2
grid-row: 1 /span 2



same for row.
Now if we want an element to be cover two elements thus we have to do is
grid-column: starting line / ending line

IMP

GRID : Auto Fit & MinMax

grid-template-areas : ; "form a matrix for its values"

Media Queries: in CSS grid.

Grid

Grid-area: Grid horizontal Line start / Grid vertica
Line start / Grid horizontal Line end / Grid vertic
Line end;

What can't in-browser javascript do?

→ Can not read/write to & from computer hard disk.
→ Same origin, ajax request | cannot access restricted data.
→ can access permitted resources only.

What makes JS Unique?

→ Html/Css full support.
→ Simple thing → Simple API (application programming Interface).
→ Major modern browser. Enabled by default.

Javascript Version:

→ Maintained by community. (1995)
→ ECMA (1997) (Standard for making .js modern.)

→ 1st version 1997
→ 2nd version 1998
→ 3rd version 1999
⋮ ⋮

→ ECMA script 2015
" 2016
" 2017
" 2018
" 2019
⋮

→ Javascript can be written in head tag. also ~~after~~ Just before "body" closing tag. But, it is recommended to write just before body closing tag.
→ It can be written in Markup by using <script> tag

VARIABLES, DATA TYPE & OPERATORS

→ var a= val
→ console.log(a); (to print "val").

OPERATORS:

→ Unary operators (It has a single operand (x=-x))
→ Binary operators (It has two operands (x=x+6))

{In 3+4, "+" is operator, 3 and 4 are two operands}

→ console.log(x);

→ var num1 = 56
→ var num2 = 67

Arithmatic operations in js.

String

→ console.log("The value of ~~num~~ num1 + num2 is" + (num1 + num2))

→ console.log("The value of num1-num2 is" + (num1 - num2));
console.log("The value of num1 ** num2 is" + (num1 ** num2));
(> exponentiation operator

→ Increment operator: (Increment by "1").
console.log("The value of ++num1 is " + (++num1));

→ (If "++" is written after "variable" first value will be printed and then the increment will take place. But variable value remain same).
→ (But in case of "++" is written earliar. then first increment take place and then value will be printed and the printed value will have a "1" added)

STRINGS IN HTML:

→ var string = "this" {if we want to add double
→ var string = 'this' {goutes in side string it
→ console.log(string) {should be surrounded by single goute or vice versa

★ "+" operator will merge or attach strigs. also concat function be used. (Pg # 23).

→ Vara temp = `${string} is a book`

To print, This is a book

{ Back tips are below Esc.

var len = string.length;

→ "To find length of variable"

→ \n → New line, \\ to print \.

* var str = "This is a string";
  console.log(str);

"For first occurance of substring"

→ Position = str.indexOf('is');
  console.log(position).

→ Position = str.lastindexOf('is');
  console.log(position).

Substring from a string:

→ var substr = str.slice(1,7); (can take -ve values)
  console.log(substr)

→ var substr = str.substring(1,7); (can not take -ve values).

→ var substr = str.substr(where to start, How much characters are selected)

var

→ str = "This is a string"

var replaced = str.replace('String', 'Harry')

→ console.log(replaced) * to print "This is a Harry".

→ console.log(str.toUpperCase()); * to print all in uppercase.

and lowercase with lowercase

→ var newstring = str.('New String')
console.log(newstring). * to print "This a is a stringNew String."

→ (.trim()) function is used to remove extra spaces from start and end.

→ var char2 = str.charAt(2) → index NO.
console.log(char2) * To print "3rd" character.

→ var char2 = str.charCodeAt(2)
console.log(char2) * to find 3rd character's code.

→ console.log(str[3]) → INDEX NO. * to get same as charAt.

Scoping:

* to describe a variable:

let, a = 4 → this can be used for all places

```
{
    let a = 6
}
```

This is a block and its a variable cannot be used outside the block.

→ const a = "constant";

CONDITIONS:

~~let, (age > 18) {~~
~~if~~

```
let a = 34;
if (a > 18) { console.log("You can play") }
else { console.log("You can't play") }.
```

```
let a = 2
if (a > 18) { console.log("You can play") }
else if (a == 2) { console.log("a is 2") }
```

console.log.
else {"You can't play"}

Alternative

```
Switch (variable) {
    case value:
        console.log( )
    break;
  default:
    console.log( )
    break;
```

ARRAYS & Objects:

→ Variable Types:

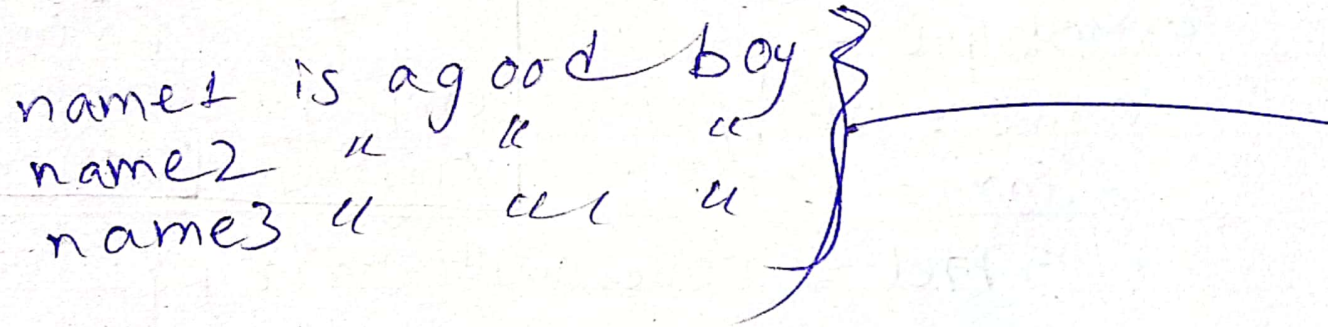
```
let a= 34
let b= "string"
let c= "true/false
let d = "null".
let e = "undefined".
```

→ Objects:

```
let employee = {
    name = "Harry".
    salary = 10
    channel = "code with harry }

console.log (employee).
```

for Printing
employee.name
employee['channel']



→ Arrays:

→ let name = [0,1,2,3, Harry]
→ let name = new Array [0,1,2,3, Harry].
→ console.log (name)
→ console.log (name[ ]) → Index no.
* for printing only one element.
→ console.log(name.length) → To find array's length.
→ name = name.sort. → (to sort the array).
→ name.push(" ") → This is use to push element in the last of array

→ let, names = new array(23)
→ "for getting "23" elements with empty space"

FUNTIONS IN.js

→ For repitation.
→ Function greet (name) {
→ console.log ('name' + " is a good boy.")}
→ greet (name1);
→ greet (name2);
→ greet (name3);

Return: Function:

```
function sum(a,b,c){
    let d= a+b+c;
    return d;
}
```

* After return no value will be executed with in function.

```
let retvalue = sum(1,2,3)
console.log(retvalue).
```

INTERACTIONS:

→ alert("This is a message")

* Shows a message
* alert function takes a string. → string

→ To ask user:

→ let name= prompt("What is your name?", "Guest")
↳ Default value.

→ Console.log(name).

→ For verification:

```
let delete-post = confirm("Do you really want to delete the post?");
console.log("deletepost");
```

LOOPS IN JAVASCRIPT:

→ Let friends = [A, B, C, D, E]

For Loop:

→ for (let index = 0; index < friends.length; index++){

→ console.log("Hello friend, " + friends[index]);}

Foreach Loop:

→ friends.ForEach(function f(element){
console.log("Hello friend," "element" + to modern javascript"); })

ForOf Loop:

→ for (element of ~~loop~~ friends){

→ console.log("Hello friend, "+ element + " to modern .js again);}

ForIn Loops;

→ let,
employee = {
name = Aba Hurairah
Salary = 200,000,
Role = Web Developer. }

→ for(key in employee){
console.log('The ${key} of employee is ${employee[key]}');}

While Loop In .js:

```
→ Let i=0;
→ While (i<4){
→     console.log(`${i} is less than 4`);
→     i++; }
```

Do While Loop In js: (Not Necessary)

Let, j=34

```
do {console.log(`${j} is less than 4 because we are inside do while loop`);
    j++; }
while(j<4);
```

NAVIGATING The DOM:

→ Let main = document.getelement byId('id').

→ console.log(main);

→ nav.innerHTML; (To get HTML in console as written in format {VS})

→ nav.innerHTML = " --- "
(To get only one element on page.)

→ let main = document.get element by class name('class')
console.log('containers')

container [0]
container [1]

→ Let sel = document.query selector ('.selector')
console.log (selector)
→ console.log('selector returns', sel) (valid for only 1st matching selectors.)
sel

→ let sel = document.query selector ALL ('.selector')
(For all matching selectors)

* About all css selectors can be used.

EVENTS IN JS:

Browser Event:
click
context menu
mouseover
mouseout
mouse down
mouse up
mouse move
submit
focus
Dom content Loaded
C&S transition end.

OnClick:

On Mouse over:

```
let para = document.getelement by Id('Para');
para.addEvent Listner('mouseover', function run(){
    alert('mouse Inside'); });
```