

WORKING WITH CSS LOCATORS:-

- CSS selector is an expression, not an attribute.
- When the elements are not getting identified with basic locators like 'id', 'name', 'class name', 'partial link', 'link text' & 'tag name' then we should ^{try} CSS selector.
- CSS stands for Cascaded Style Sheet which is basically used to provide reusable component for UI look & feel (Common colors, button shape, font color, font size etc)
- In CSS selector we have several syntax to identify the objects uniquely.

1) CSS selector with 'id' attribute →

Syntax ⇒ #idvalue or htmltag #idvalue

For ex. html code ↴

```
<input type="text" id="123" class="login">
```

```
<div id="123" class="abc xyz pqr login"> </div>
```

Possible CSS expressions →

- 1) #123 (2 matches)
- 2) input #123 → 1 match
- 3) div #123 → 1 match

2) CSS Selector using 'class' attribute →

Syntax ⇒ .classname or htmltag.classname

For ex.

```
<input type="text" class="userName">
```

```
<label type="text" class="userName abc xyz">
```

.userName → 2 matches

.username, abc. xyz → 1 match

.abc. xyz →

.abc

.xyz

.userName.abc

.userName.xyz

1 match

html tag ↴

input.userName

label.userName

label.userName.abc.xyz

label.abc.xyz

label.abc

1 match

~~for~~

3) css selector with any attribute:-

html tag [Attribute name = Attribute value]

For ex.

```
< input type = "email" class = "input text"
name = "email" id = "email" data-test id = "royal
_email" placeholder = "Email id">
```

Possible css expressions are :-

input [type = "email"]

input [class = "input text"]

input [name = "email"]

input [id = "email"]

input [data-test id = "royal_email"]

input [placeholder = "Email id"]

4) css Selector with multiple HTML attribute -

syntax :-

html tag [Attribute name = Attribute value]
[Attribute name = Att. value] [AN = AV]...

For ex. html code is

```
< input type = "email" name = "email" id = "email">
```

possible css expressions are,

1) input [type = 'email'] [name = 'email'] [id = 'email']

2) input [type = 'email'] [name = 'email']

3) input [type = 'email'] [id = 'email']

4) input [name = 'email'] [id = 'email']

5) css with dynamic elements:-

- In real time application, you might come across a situation where the html attribute value gets changed on every refresh or every login.

- To overcome this, we use any one of the below mentioned syntax.

i) When the attribute value contains static text in the starting followed by dynamic text or numbers

For eg.

```
< input type = "email" class = "input text" id = "email_123"
```

```
< _____ id = "email_4567"
```

```
< _____ id = "email_abc4"
```

syntax → html tag [Att.name[^] = Attribute value]

css expression → input [id[^] = 'email'] or

_____ → input [id[^] = 'email_1']

ii) When the attribute value is static at the end preceded by dynamic text or number then we should use below mentioned syntax →

html tag [Attribute Name \$ = Attribute value']

e.g.

<input type="email" id="email10" data-testid="123-royalemail">

<_____ "_____ data-testid = "<CG-royalemail">

<_____ "_____ = "exy -royalemail">

input [data-testid \$ = "royalemail"]

iii) When the attribute value is having some static text but this text position is not fixed, sometimes it comes in the starting, sometimes in the end or in between. Then we should use below mentioned syntax

html tag [Attribute name * = Attribute value]

e.g. <input type="email" id="123-royalemail-234">
 <_____ "_____ = "royalemail-4bc">
 input [id * = "royalemail"]

iv) You might come across a situation where html tag itself is dynamic, then we can use below mentioned syntax.

* [Attribute name = Attribute value]

Or [Attribute Name = Attribute value]

6) CSS selector with position:-

While working with realtime applⁿ you might come across a situation, the required element or object is not getting identified by its own. They need a support from parent tags.

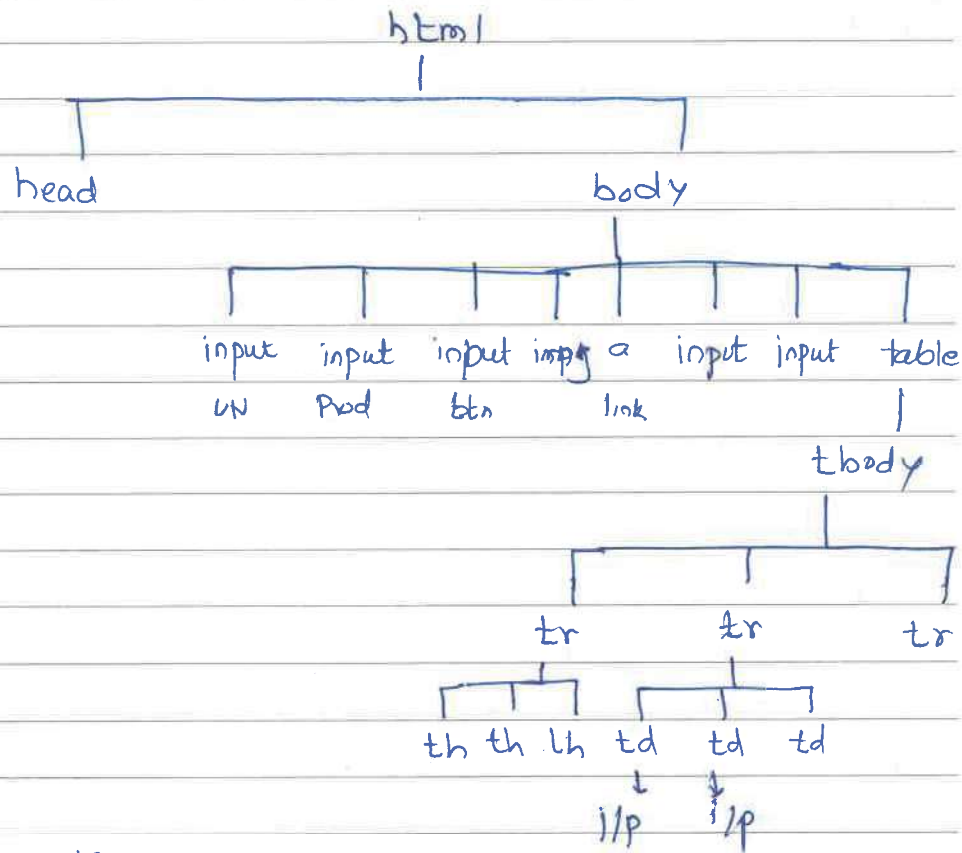
In order to do this, we can write CSS expression in two different ways -

i) Absolute CSS expression -

Starting from the html tag till the target element.

ii) Relative CSS expression -

Starting in between any of the parent tag of the required object till the target element.



Absolute position { `html > body > input`

`html > body input`

`html & input [id='123']`

`table > tbody > tr > td > input`

`table input`

When the html hierarchy is too lengthy or complex then we might need to use the required element position or occurrence with the help of below mentioned syntax

`> * : first-child`

`> * : last-child`

`> * : nth-child (index)`

`> htmltag : nth-of-type (occurrence)`

Q. Write a script to open a chrome browser, enter the Facebook URL, enter username & password, click on login button, validate Facebook homepage, Logout from Facebook & close the browser.