1.create a form, do the validation with the help of jquery and regular expression.

i>Username should only start with letter A,P,Q,Z and end with Biya,We,Jzz

```
<script>
    function validateForm() {
        var fname = $('#first_name').val();
        var fnameRx = /^([APQZ])\w*(Biya|We|Jzz)$/;
        if (!fnameRx.test(fname)) {
            $('#error').show();
            $('#error').text("Invalid name, name should start with A, P, Q or Z and end with Biy
            //return true;
        }
```

ii>User the last name should start with Bhfy, W124, Jv.! and end with A, P,Q,Z

```
//For lastname
var lname = $('#last_name').val();
var lnameRx = /^(Bhfy|W124|Jv.!)\w*([APQZ])$/;
if (!lnameRx.test(lname)) {
    $('#error').show();
    $('#error').text("Invalid name, last name should start with Bhfy, W124, Jv.! and end with A,
    //return false;
}
```

iii> Contact no should start with 9,6,7,8 and end with 7,3646,976

```
//For Contact Number

var contact_no = $('#contact_no').val();
var contact_noRx = /^([9678])\d{1,7}(7|3646|976)$/;
//  var contact_noRx = /^([a-zA-Z]+[@][A-Za-z][.][a-zA-Z])$/;
if (!contact_noRx.test(contact_no)) {
    $('#error').show();
    $('#error').text("Contact no should start with 9,6,7,8 and end with 7,3646,976");

    return false;
}
```

iv> Email validation should be there with regular expression.

```
//For email
var email = $('#email').val();
var emailRx = /^([a-zA-Z0-9_\-\.]+)@([a-zA-Z0-9_\-\.]+)\.([a-zA-Z]{2,5})$/;
if (!emailRx.test(email)) {
    $('#error').show();
    $('#error').text("Invalid Email");

    return false;
}
```

**The above exercise will be on HTML and jquery with the proper functioning*

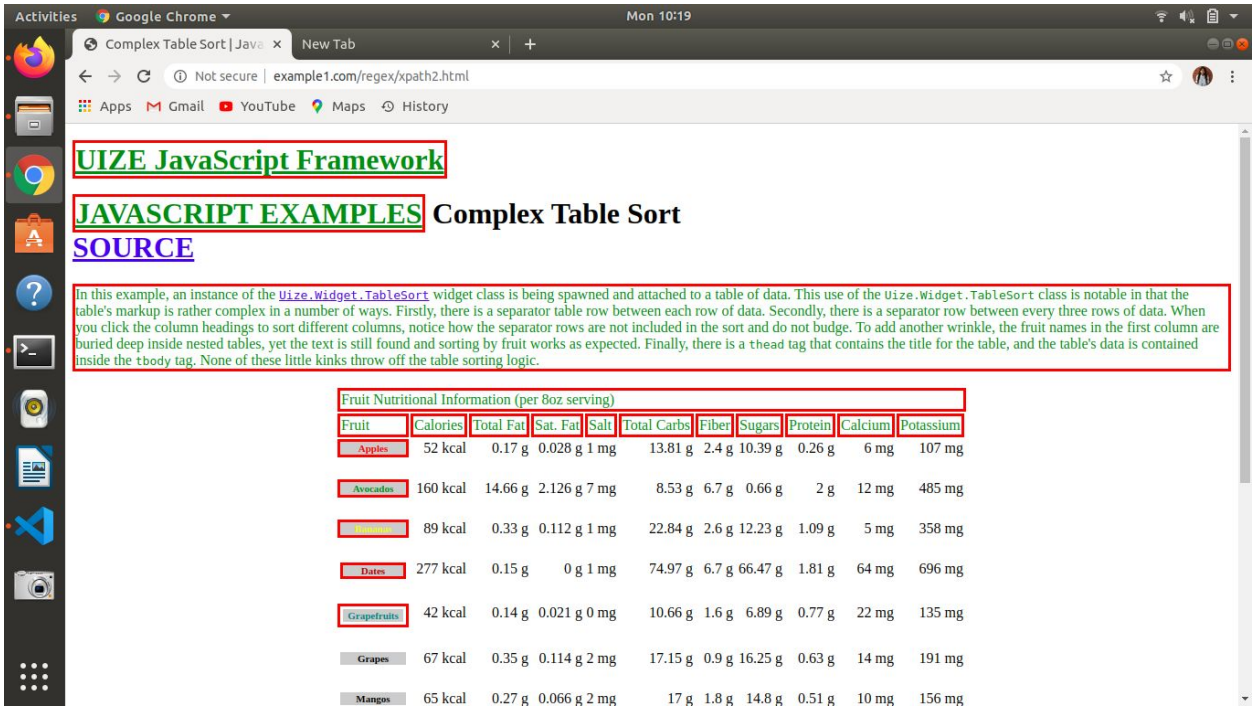
2. Use XPath to determine/Select At least 10 elements on google chrome from the given HTML:-

https://docs.google.com/document/d/14O5UaTngsxnSIbYYVwR3y8THNnGBJXx0y_DtQdivAkU/edit

**do not copy XPath from developer tool use only your understanding to determine Xpath*

```
console.log($(_x('//h1[@class="header"]/a[2]')).css({
    'color': 'green',
    'border': '3px solid red'
}));
console.log($(_x('//*[@class="main"]/h1/a')).css({
    'color': 'green',
    'border': '3px solid red'
}));
console.log($(_x('/html/body/div/div/p[1]')).css({
    'color': 'green',
    'border': '3px solid red'
}));
console.log($(_x('//table[@id="tableOfFruits"]//tr[@class="title"]/td')).css({
    'color': 'green',
    'border': '3px solid red'
}));
$(_x('//*//tr[@class="heading"]/td')).css({
    'color': 'green',
    'border': '3px solid red'
});
```

```
console.log($(_x('/html/body/div/table/tbody/tr[2]/td[1]')).css({
    'color': 'green',
    'background-color': 'red'
}));
console.log($(_x('//*[@id="tableOfFruits"]/tbody/tr[4]/td[1]')).css({
    'color': 'green',
    'background-color': 'red'
}));
console.log($(_x('//*/tbody/tr[6]/td[1]')).css({
    'color': 'green',
    'background-color': 'red'
}));
console.log($(_x('/html/body/div/table/tbody/tr[8]/td[1]/table/tbody/tr/td')).css({
    'color': 'green',
    'border': '3px solid red'
}));
console.log($(_x('/html/body/div/table/tbody/tr[10]/td[1]')).css({
    'color': 'green',
    'border': '3px solid red'
}));
```



3. In the given HTML use **text, contains** the function of XPATH to determine the value of different 5 fruit names.

```
// //console.log($(_x('//td[contains(text(), "Orange")]')).text());
var obj = $(_x('//*[contains(text(), \"Apples\")]')).css({
    'color': 'red'
});
console.log(obj[0]);
console.log(obj[0].innerText);
var obj1 = $(_x('//*[contains(text(), \"Avocados\")]')).css({
    'color': 'green'
});
console.log(obj1[0]);
console.log(obj1[0].innerText);
var obj2 = $(_x('//*[contains(text(), \"Bananas\")]')).css({
    'color': 'yellow'
});
console.log(obj2[0]);
console.log(obj2[0].innerText);
var obj3 = $(_x('//*[contains(text(), \"Dates\")]')).css({
    'color': 'brown'
});
console.log(obj3[0]);
console.log(obj3[0].innerText);
var obj4 = $(_x('//*[contains(text(), \"Grapefruits\")]')).css({
    'color': 'teal'
});
console.log(obj4[0]);
console.log(ob4[0].innerText);
```

Apples	52 kcal	0.17 g	0.028 g	1 mg	13.81 g	2.4 g	10.39 g	0.26 g	6 mg	107 mg
Avocados	160 kcal	14.66 g	2.126 g	7 mg	8.53 g	6.7 g	0.66 g	2 g	12 mg	485 mg
Bananas	89 kcal	0.33 g	0.112 g	1 mg	22.84 g	2.6 g	12.23 g	1.09 g	5 mg	358 mg
Dates	277 kcal	0.15 g	0 g	1 mg	74.97 g	6.7 g	66.47 g	1.81 g	64 mg	696 mg
Grapefruits	42 kcal	0.14 g	0.021 g	0 mg	10.66 g	1.6 g	6.89 g	0.77 g	22 mg	135 mg

4.create database according to your understanding with basic profile detail and write queries to fetch all data-name, contact, email, address on the basis of REGULAR EXPRESSION.

TABLE

```
mysql> select * from form;
+----------------+----------------+-------------------------+------------+
| first_name     | last_name      | email                   | contact_no |
+----------------+----------------+-------------------------+------------+
| AaaaBiya       | BhfyZ          | ef@ef.com               | 9209348309 |
| AaaaFBiya      | BhfyGHGZ       | eram45@gmail.com        | 7657686464 |
| AaaaBiya       | BhfyZ          | eram@gmail.com          | 7657646464 |
| eram           | Fatima         | erum@gmail.com          | 9891165336 |
| AaaddtdtgaBiya | BhfyhdtgdZ     | erumhdttdtd@yopmail.com | 1212121212 |
| AaaaBiya       | BhfyhdddddfdfZ | sahilqaiser7856@hmm.com | 1234512345 |
| sadaf          | fatima         | sahilqaiser@hmm.com     | 8209348309 |
| AaaammmBiya    | BhfymmmmZ      | sahilqaiser@hmmnnn.com  | 9767676976 |
| sara           | khan           | sara@example.com        | 8765263748 |
+----------------+----------------+-------------------------+------------+
9 rows in set (0.00 sec)
```

QUERIES USING REGEXP

```
mysql>  SELECT * FROM form WHERE first_name REGEXP '^(Aaa)+';
+----------------+----------------+--------------------------+------------+
| first_name     | last_name      | email                    | contact_no |
+----------------+----------------+--------------------------+------------+
| AaaaBiya       | BhfyZ          | ef@ef.com                | 9209348309 |
| AaaaFBiya      | BhfyGHGZ       | eram45@gmail.com         | 7657686464 |
| AaaaBiya       | BhfyZ          | eram@gmail.com           | 7657646464 |
| AaaddtdtgaBiya | BhfyhdtgdZ     | erumhdttdtd@yopmail.com  | 1212121212 |
| AaaaBiya       | BhfyhdddddfdfZ | sahilqaiser7856@hmm.com  | 1234512345 |
| AaaammmBiya    | BhfymmmmZ      | sahilqaiser@hmmnnn.com   | 9767676976 |
+----------------+----------------+--------------------------+------------+
6 rows in set (0.00 sec)
```

```
mysql> select * from form where email REGEXP '^(er)+';
+----------------+------------+--------------------------+------------+
| first_name     | last_name  | email                    | contact_no |
+----------------+------------+--------------------------+------------+
| AaaaFBiya      | BhfyGHGZ   | eram45@gmail.com         | 7657686464 |
| AaaaBiya       | BhfyZ      | eram@gmail.com           | 7657646464 |
| eram           | Fatima     | erum@gmail.com           | 9891165336 |
| AaaddtdtgaBiya | BhfyhdtgdZ | erumhdttdtd@yopmail.com  | 1212121212 |
+----------------+------------+--------------------------+------------+
4 rows in set (0.00 sec)
```

```
mysql> mysql>  SELECT * FROM form WHERE last_name REGEXP '^(BhfyZ)+';
+------------+-----------+----------------+------------+
| first_name | last_name | email          | contact_no |
+------------+-----------+----------------+------------+
| AaaaBiya   | BhfyZ     | ef@ef.com      | 9209348309 |
| AaaaBiya   | BhfyZ     | eram@gmail.com | 7657646464 |
+------------+-----------+----------------+------------+
2 rows in set (0.00 sec)
```

```
mysql>  SELECT * FROM form WHERE contact_no REGEXP '^(9209)+';
+------------+-----------+-----------+------------+
| first_name | last_name | email     | contact_no |
+------------+-----------+-----------+------------+
| AaaaBiya   | BhfyZ     | ef@ef.com | 9209348309 |
+------------+-----------+-----------+------------+
1 row in set (0.00 sec)
```