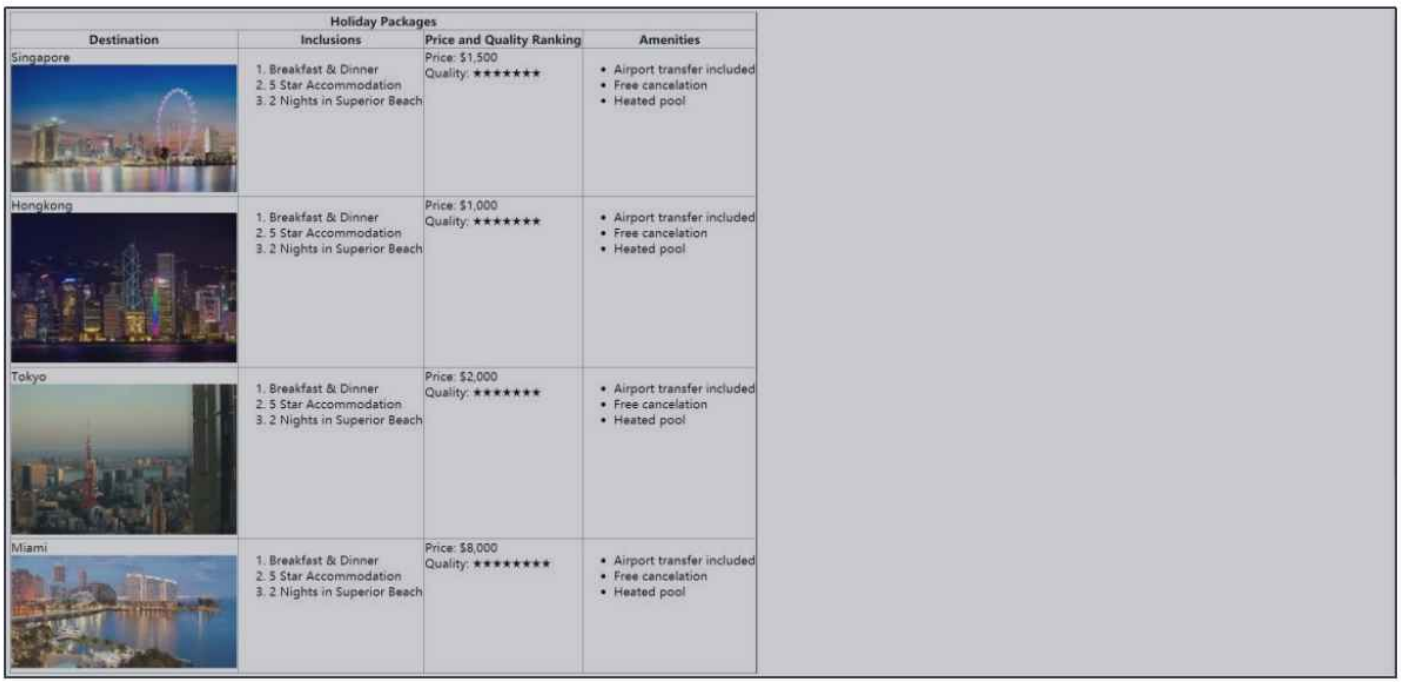
884期末复习

Assignment 1

Task 1 table, tr th, tr td

As is shown below, we have seven holiday packages, which are Singapore, Hongkong, Tokyo, Miami, Hokkaido, Sydney and Melbourne.



Holiday Packages			
Destination	Inclusions	Price and Quality Ranking	Amenities
Singapore	1. Breakfast & Dinner 2. 5 Star Accommodation 3. 2 Nights in Superior Beach	Price: $1,500 Quality: ★★★★★★★	• Airport transfer included • Free cancelation • Heated pool
Hongkong	1. Breakfast & Dinner 2. 5 Star Accommodation 3. 2 Nights in Superior Beach	Price: $1,000 Quality: ★★★★★★★	• Airport transfer included • Free cancelation • Heated pool
Tokyo	1. Breakfast & Dinner 2. 5 Star Accommodation 3. 2 Nights in Superior Beach	Price: $2,000 Quality: ★★★★★★★	• Airport transfer included • Free cancelation • Heated pool
Miami	1. Breakfast & Dinner 2. 5 Star Accommodation 3. 2 Nights in Superior Beach	Price: $8,000 Quality: ★★★★★★★★	• Airport transfer included • Free cancelation • Heated pool

```html
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>Holiday Packages - by Kama Wang(7350752)</title>
</head>
<body>
    <table border="1" style="border-collapse: collapse;">
        <tr>
            <th colspan="4">Holiday Packages</th>
        </tr>
        <tr>
            <th>Destination</th>
            <th>Inclusions</th>
            <th>Price and Quality Ranking</th>
            <th>Amenities</th>
```

```
        </tr>
        <tr>
            <td align="top">
                <div>Singapore</div>
                <img src="https://ts1.cn.mm.bing.net/th/id/R-C.ef2d3ea5c43d6bb33
            </td>
            <td align="top">
                <ol>
                    <li>Breakfast & Dinner</li>
                    <li>5 Star Accommodation</li>
                    <li>2 Nights in Superior Beach</li>
                </ol>
            </td>
            <td align="top">
                <div>Price: $1,500</div>
                <div>Quality: &#9733;&#9733;&#9733;&#9733;&#9733;&#9733;&#9733;<
            </td>
            <td align="top">
                <ul>
                    <li>Airport transfer included</li>
                    <li>Free cancelation</li>
                    <li>Heated pool</li>
                </ul>
            </td>
        </tr>
    </table>
</body>
</html>
```

Task 2 CSS，class和id

As is shown in the picture below, we have top 10 travel destinations, that is, Hangzhou, Shanghai, Xiamen, Taipei, Hongkong, Beijing, Suzhou, Nanjing, Lijiang and Wuhan. These cities are all in China

Destination	Introduction	What to visit
Hangzhou	Hangzhou is the capital of Zhejiang Province in eastern China and is one of the most modern and prosperous cities in China, located about 100 kilometers (60 miles) southwest of Shanghai. It is situated at the southern end of the Grand Canal and is one of the seven ancient capitals of China. When Marco Polo came to Hangzhou in the 13th century, he declared it "the most beautiful and elegant city in the world".	• Lingyin Temple • West Lake • Jingci Temple
Shanghai	Shanghai, the largest city in China, is one of the four central municipalities. It is the economic, financial, trade and shipping center of mainland China. Shanghai has created and broken many of the world's best and China's best by the China World Records Association. Located at the mouth of the Yangtze River in the middle of China's mainland coastline, Shanghai has the largest industrial base and the largest foreign trade port in China.	• Disneyland • Bund • Oriental Pearl

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>Top 10 Travel Destinations - by Kama Wang(7350752)</title>
    <style>
        #travelTable {
          font-size: 20px;
          border-style: solid;
          border-collapse: separate;
          border-spacing: 1px;
        }
        id类型
        #headerRow {
          font-size: 25px;
          color: navy;
          background-color: #00000010;
        }
        class类型
        .destRow {
          background-color: rgb(158, 179, 237);
        }
        #travelTable th {
          padding: 20px;
          border-style: dotted;
          border-color: green;
          border-width: 3px;
          height: 45px;
        }
        #travelTable td {
          padding: 20px;
          border-style: solid;
          border-color: gray;
```

```
            border-width: 1px;
        }
        .destCol {
            text-align: center;
            vertical-align: center;
        }
        .destIntro {
            width: 800px;
        }

    </style>
</head>
<body>
    <table border="1px" id="travelTable">
        <tr id="headerRow">
            <th>Destination</th>
            <th>Introduction</th>
            <th>What to visit</th>
        </tr>
        <tr class="destRow">
            <td class="destCol">Hangzhou</td>
            <td class="destIntro">Hangzhou is the capital of Zhejiang Province in
            <td>
                <ul>
                    <li>Lingyin Temple</li>
                    <li>West Lake</li>
                    <li>Jingci Temple</li>
                </ul>
            </td>
        </tr>
    </table>
</body>
</html>
```

Assignment 2

Task 1 button, js

Q1. Create a webpage A2-Task1-**StudentName-StudentNumber**.html.

The title of the webpage should include your Student Name and Student Number. On the webpage, display 3 buttons "Double", "Half" and "Reset Number". Below the buttons, display a randomly generated two-digit number in red color.

- Whenever the user clicks the button "Double", the presented number is multiplied by 2 (e.g. 15*2 = 30);
- Whenever the user clicks the button "Half", the presented number is divided by 2 (e.g. 15/2 = 7.5);
- Whenever the user clicks the button "Reset Number", a new random two-digit number is generated.
- Count and display how many times the user has clicked the button "Reset Number". The value of the counter should be displayed next to the "Reset Number" button.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang-7350752</title>
</head>
<body>
    <button onclick="double()">Double</button> <br>
    <button onclick="half()">Half</button> <br>
    <button onclick="reset()">Reset Number</button>
    <span id="resetTimes">0</span> <br>
    <span id="Number" style="color: red;"></span>
    <script>
        var randomNum = Math.ceil(Math.random()*100)
        var num = document.getElementById("Number")
        var resetTimes = 0
        num.innerHTML = randomNum
        function double() {
            num.innerHTML = 2 * Number(num.innerHTML)
        }
        function half() {
            num.innerHTML =  Number(num.innerHTML) /2
        }
        function reset() {
            resetTimes += 1
            num.innerHTML =  Math.ceil(Math.random()*100)
            var resetEle = document.getElementById("resetTimes")
            resetEle.innerHTML = resetTimes
        }
```

```
    </script>
</body>
</html>
```

Task 2 Form input

Q2. Create a webpage A2-Task2-**StudentName-StudentNumber**.html.

The title of the webpage should include your Student Name and Student Number. On the webpage, display 3 text fields for the user to enter 3 words with instructions "Enter name", "Enter sport", "Enter day in the week".

Below the text fields, display a button "Create sentence". Whenever the user clicks the button "Create sentence", display the following information, one on each line:

- My name is *name* (the sentence should be in all capital letters)
- I like *sport* (the sentence should be in all small letters)
- Your name has *num* of characters
- *Name* is having *sport* on *day*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang-7350752</title>
    <script>
        function display() {
            var nameEle = document.getElementById("name")
            var sportEle = document.getElementById("sport")
            var weekEle = document.getElementById("week")
            var line1Ele = document.getElementById("line1")
            var line2Ele = document.getElementById("line2")
            var line3Ele = document.getElementById("line3")
            var line4Ele = document.getElementById("line4")
            line1Ele.innerHTML = "MY NAME IS " + nameEle.value.toUpperCase()
            line2Ele.innerHTML = "I like " + sportEle.value.toLowerCase()
            line3Ele.innerHTML = "Your name has " + nameEle.value.length + " cha
            line4Ele.innerHTML = nameEle.value + " is having " + sportEle.value
        }
    </script>
</head>
<body>
    Enter name: <input type="text" id="name"> <br>
```

```
    Enter sport: <input type="text" id="sport"> <br>
    Enter day in the week: <input type="text" id="week"> <br>
    <button onclick="display()">Create sentence</button> <br>
    <span id="line1"></span> <br>
    <span id="line2"></span> <br>
    <span id="line3"></span> <br>
    <span id="line4"></span> <br>
</body>
</html>
```

Task 3 mouse over

Q3. Create a webpage A2-Task3-**StudentName-StudentNumber**.html.

The title of the webpage should include your Student Name and Student Number. In this task, you will show how we can make bread. For that purpose, you will need to use 4 images of: flour; flour and water; oven; and bread.

When the webpage loads the image of the bread should be shown,

- Whenever the user hover over (move mouse over) the bread, change the image to flour;
- Whenever the user hover over (move mouse over) the flour, change the image to flour and water;
- Whenever the user hover over (move mouse over) the flour and water, change the image to oven;
- Whenever the user hover over (move mouse over) the oven, change the image back to bread.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang-7350752</title>
    <script>
        function changeImg() {
            imgEle = document.getElementById("img")
            if (imgEle.name === "bread") {
                imgEle.src = "flour.jpg"
                imgEle.name = "flour"
            } else if (imgEle.name === "flour") {
                imgEle.src = "flour and water.jpg"
                imgEle.name = "flour and water"
            } else if (imgEle.name === "flour and water") {
```

```
16                  imgEle.src = "oven.jpg"
17                  imgEle.name = "oven"
18              } else if (imgEle.name === "oven") {
19                  imgEle.src = "bread.jpg"
20                  imgEle.name = "bread"
21              }
22          }
23      </script>
24  </head>
25  <body>
26      <img src="bread.jpg" alt="bread" width="400px" name="bread" onmouseover="cha
27  </body>
28  </html>
```

Task 4 checkbox ,form method

Q4. Consider the following fictional scenario, and create a webpage A2-Task4-**StudentName-StudentNumber**.html, that contains a webform.

The "MyChoice" website offers restaurant reservations. The user can choose from 4 restaurants: "MyTime-Wollongong", "PerfectDish-Kiama", "DinerOut-Buli", "SpotOn-Shellharbour". To make the reservation the user needs to provide the name, number of guests, email, phone and preferred time slot. The webform also has a text area where the user can include special requirements (if any). Additionally, the user can indicate the preferred method for communication (notifications regarding the reservations and future advertisements).

The back-end service is running at http://mychoice55.com/query and it accepts GET request with the following parameters:

- rest: this parameter is to specify the restaurant, the acceptable values are:
  - 1: for "MyTime-Wollongong"
  - 2: for "PerfectDish-Kiama"
  - 3: for "DinerOut-Buli"
  - 4: for "SpotOn-Shellharbour"
- name: this parameter is to specify the name of the user;
- num: this parameter is to specify the number of guests;
- phone: this parameter is to specify the user's mobile phone number;
- email: this parameter is to specify the user's email;
- time: this parameter is to specify the user's preferred time slot, and the acceptable values are:
  - e: for 4-6 pm

    - m: for 6-8 pm
    - l: for 8-10 pm
- req: this parameter is to specify the user's special requirements;
- note: this parameter is to specify the user's preferred method for communication, it accepts zero to multiple values, and the acceptable values are:
    - SMS: for notification via SMS
    - EM: for notification via email
    - SUB: for subscription for future advertisements

Create a web form with the following requirements:

- Use a drop-down list: for the restaurant choice
- Use a text field: for the name of the user
- Use a text field: for the number of guests
- Use a text field: for the user's mobile phone number
- Use a text field: for the user's email
- Use 3 radio buttons: for the preferred time slot
- Use a text area: for the user's special requirements
- Use 3 checkboxes: for the preferred method for communication
- The webform has 2 buttons: one for submit and one for reset the form.
- Use table arrangement so that your webform looks presentable for the users.
- Your webform must explicitly specify the correct action and method.
- You should test the web form to see if it submits the correct parameters and values to the server.

Restaurant Reservation	
Restaurant	MyTime-Wollongong
Name	
Guests number	
Phone	
Email	
Preferred time slot	○ 4–6 pm ○ 6–8 pm ○ 8–10 pm
Special requirements	
Notes	☐ SMS ☐ Email ☐ Subscripion for further advertisement
Submit Reset	

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang-7350752</title>
</head>
<body>
    <form action="http://mychoice55.com/query" method="get">
        <table border="1px" style="border-collapse: collapse;">
            <tr>
                <th colspan="2">Restaurant Reservation</th>
            </tr>
            <tr>
                <td>
                    Restaurant
                </td>
                <td>
                    <select name="rest">
                        <option value="1">MyTime-Wollongong</option>
                        <option value="2">PerfectDish-Kiama</option>
                        <option value="3">DinerOut-Buli</option>
                        <option value="4">SpotOn-Shellharbou</option>
                    </select>
                </td>
            </tr>
            <tr>
                <td>
                    Name
                </td>
                <td>
                    <input type="text" name="name">
                </td>
            </tr>
                <td>
                    <input type="radio" name="time" value="e"> 4-6 pm <br>
                    <input type="radio" name="time" value="m"> 6-8 pm <br>
                    <input type="radio" name="time" value="l"> 8-10 pm <br>
                </td>
            </tr>
            <tr>
                <td>
                    Special requirements
                </td>
                <td>
                    <textarea name="req" cols="30" rows="10"></textarea>
                </td>
```

```
            </tr>
            <tr>
                <td>
                    Notes
                </td>
                <td>
                    <input type="checkbox" name="note" value="SMS">SMS <br>
                    <input type="checkbox" name="note" value="EM">Email <br>
                    <input type="checkbox" name="note" value="SUB">Subscripion f
                </td>
            </tr>
            <tr>
                <td colspan="2" align="center">
                    <button type="submit">Submit</button>
                    <button type="reset">Reset</button>
                </td>
            </tr>
        </table>

    </form>
</body>
</html>
```

Assignment 3

Task 1 interval

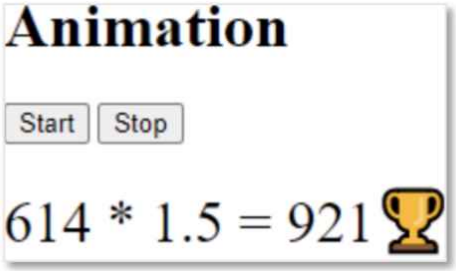
Q1. Create a webpage (A3-Task1-**StudentName-StudentNumber**.html) that has two buttons 'Start' and 'Stop' as shown in the figure below. When the 'Start' button is pressed, animation starts - a random number in the range of [1, 1000] is generated, and after 1 second the website displays a equation based on the generated random number. Next to the equation, a randomly chosen emoji is displayed.

For example, the generated random number is 614.

- When the animation starts, the web page may display 614 * 1 = 614 🌟
- After 1 second, the web page will display 614 * 1.5 = 921 🌞
- then another second later 614 * 2 = 1228 🌛, and so on.

In this animation, you must use a randomly generated number. The second number in the equation is increased by 0.5 every second. The emoji is randomly chosen from a predefined list of at least 3 emoji.

When the button "Stop" is clicked, then the web page stops the animation, whatever the equation is currently displayed will stay there on the page. When the user clicks the start button again, the animation is reset and a new random number is generated.




```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang 7350752</title>
    <script>
        var num1, num2;
        var timer;
        var emojiList = ["&#128540", "&#128516", "&#128523"]
        function startAnimation() {
            clearInterval(timer);
            var display = document.getElementById("display");
            num1 = Math.floor(Math.random()*1000)+1;
            num2 = 0.5;
            timer = setInterval(() => {
                num2 = num2 + 0.5;
                var idx = Math.floor(Math.random()*3);
                var emoji = emojiList[idx];
                display.innerHTML = `${num1} * ${num2} = ${num1 * num2}${emojiLi
```

```
            }, 1000);
        }
        function stopAnimation() {
            clearInterval(timer);
        }
    </script>
</head>
<body>
    <h1>Animation</h1>
    <button onclick="startAnimation()">Start</button>
    <button onclick="stopAnimation()">Stop</button>
    <p id="display"></p>
</body>
</html>
```

Task 2 js修改CSS

Q2. Create a web page (A3-Task2-**StudentName-StudentNumber**.html) with the title "Just for fun!".

The Webpage should have a heading "Everything is Fun!", and three buttons "rotate", "scale", "all-in-one";

When the user moves the mouse pointer over the heading, the color of the text will randomly change to "yellow", "blue", "green", or "red".

When the user moves the mouse pointer over the "rotate" button, the button will rotate for 45° clockwise.

When the user moves the mouse pointer over the "scale" button, the button will double its size.

When the user moves the mouse pointer over the "all-in-one" button, the button will rotate for 60° counterclockwise and will scale up for 50%.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
    <title>Just For Fun</title>
</head>

<style>
    .center{width:800px; height: 500px;
            align-items: center;
```

```
            -webkit-align-items: center;
            -ms-flex-align: center;
            display: -webkit-flex;
            display: flex;
            height: 100 %;
            margin: 0; }
</style>

<body>
    <div class="center">
        <h1 id="esf" onmouseover="motify()">Everything is Fun!</h1>
    </div>

    <table>
        <tr>
            <th>
                <button onmouseover="rotate()">rotate</button>
            </th>
            <th>
                <button onmouseover="scale()">scale</button>
            </th>
            <th>
                <button onmouseover="all_in_one()">all-in-one</button>
            </th>
        </tr>
    </table>
</body>


<script>
    function motify(){
        var color=new Array();
        color=["Cyan","Coral","Gold","brown"]
        var esf = document.getElementById("esf");
        var random=Math.floor(Math.random()*4)
        esf.style.color = color[random];
    }


    function rotate (){
        document.getElementById('esf').style.transform = 'rotate(45deg)';
    }

    function scale (){
        document.getElementById('esf').style.transform = 'scale(2)';
    }

```

```
    function all_in_one(){
        document.getElementById('esf').style.transform='rotate(-60deg) scale(1.5
    }

</script>
</html>
```

Task 3 DTD

Q3. Write an XML document (A3-Task3-**StudentName-StudentNumber**.xml) that represents the following receipt.

The XML should contain internal DTD (XML Document Type Definition).

Receipt

Number: 113654
Date: 15/03/2022
Products

Description	*Quantity*	*Amount*
Milk	2	7.20
Chicken tenders	5	25.75

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE receipt [
    <!ELEMENT receipt (products)>
    ATTLIST代表属性
    <!ATTLIST receipt number CDATA #REQUIRED>
    <!ATTLIST receipt date CDATA #REQUIRED>
    <!ELEMENT products (product+)>
    <!ELEMENT product (description,quantity,amount)>
    <!ELEMENT description (#PCDATA)>
    <!ELEMENT quantity (#PCDATA)>
    <!ELEMENT amount (#PCDATA)>
]>
<receipt number="113654" date="15/03/2022" >
    <products>
        <product>
            <description>Milk</description>
            <quantity>2</quantity>
            <amount>7.20</amount>
        </product>
        <product>
            <description>Chicken tenders</description>
            <quantity>5</quantity>
```

```
            <amount>25.75</amount>
        </product>
    </products>
</receipt>

```

Task 4 XML XSD

Q4. Write an XML (A3-Task4-**StudentName-StudentNumber**.xml) document that represents the following record.

Write the corresponding XSD code and save it into the file A3-Task4-**StudentName-StudentNumber**.xsd.

Storage Rooms

Address: 52 Some Street, NSW 2500

Inventory

Code	*No. Items*	*Status*
INV-522	2	Replaced
RCE-1236	7	Operational

Next revision: 20/12/2022

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="storageRoom">
        <xs:complexType>
            <xs:sequence>
                <xs:element name="address" type="xs:string" />
                <xs:element name="inventory">
                    <xs:complexType>
                        <xs:sequence>
                            <xs:element name="item" maxOccurs="unbounded">
                                <xs:complexType>
                                    <xs:sequence>
                                        <xs:element name="code" type="xs:string"
                                        <xs:element name="No.Items" type="xs:int
                                        <xs:element name="status" type="xs:strin
                                    </xs:sequence>
                                </xs:complexType>
                            </xs:element>
                        </xs:sequence>
                    </xs:complexType>
                </xs:element>
            </xs:sequence>
            <xs:attribute name="nextRevision" type="xs:string" />
            <xs:attribute name="studentName" type="xs:string" />
```

```
            <xs:attribute name="studentNumber" type="xs:string" />
        </xs:complexType>
    </xs:element>
</xs:schema>

```

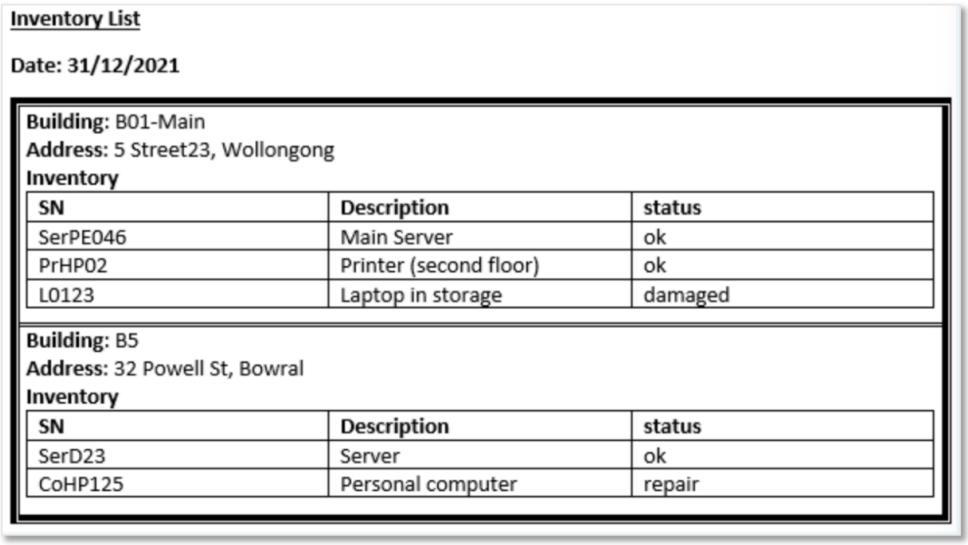
```
<?xml version="1.0" encoding="UTF-8"?>
<storageRoom xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:noNamespaceSchemaLocation="A3-Task4-Kama%20Wang-7350752.xsd"
 nextRevision="20/12/2022" studentName="Kama Wang" studentNumber="7350752">
    <address>52 Some Street, NSW 2500</address>
    <inventory>
        <item>
            <code>INV-522</code>
            <No.Items>2</No.Items>
            <status>Replaced</status>
        </item>
        <item>
            <code>RCE-1236</code>
            <No.Items>7</No.Items>
            <status>Operational</status>
        </item>
    </inventory>
</storageRoom>

```

Assignment 4

Task 1

Q1. Write an XML file (A4-Task1-**StudentName-StudentNumber**.xml) that contains the following inventory list records:



Inventory List

Date: 31/12/2021

Building: B01-Main
Address: 5 Street23, Wollongong
Inventory

SN	Description	status
SerPE046	Main Server	ok
PrHP02	Printer (second floor)	ok
L0123	Laptop in storage	damaged

Building: B5
Address: 32 Powell St, Bowral
Inventory

SN	Description	status
SerD23	Server	ok
CoHP125	Personal computer	repair

```xml
<?xml version="1.0" ?>
<inventoryList date="31/12/2021" studentName="Kama Wang" studentNum="7350752">
    <inventory building="B01-Main" Address="5 Street23, Wollongong">
        <item>
            <SN>SerPE046</SN>
            <description>Main Server</description>
            <status>ok</status>
        </item>
        <item>
            <SN>PrHP02</SN>
            <description>Printer(second floor)</description>
            <status>ok</status>
        </item>
    </inventory>
    <inventory building="B5" Address="32 Powell St, Bowral">
        <item>
            <SN>SerD23</SN>
            <description>Server</description>
            <status>ok</status>
        </item>
    </inventory>
</inventoryList>
```

Task 2 json

Q2. Write a JSON file (A4-Task2-**StudentName-StudentNumber**.json) that contains the following inventory list records:

Inventory List

Date: 31/12/2021

Building: B01-Main
Address: 5 Street23, Wollongong
Inventory

SN	Description	status
SerPE046	Main Server	ok
PrHP02	Printer (second floor)	ok
L0123	Laptop in storage	damaged

Building: B5
Address: 32 Powell St, Bowral
Inventory

SN	Description	status
SerD23	Server	ok
CoHP125	Personal computer	repair

```
{
    "inventoryList":[
        {
            "building": "B01-Main",
            "addressing": "5 Street23, Wollongong",
            "inventory": [
                {
                    "SN": "SerPE046",
                    "description": "Main Server",
                    "status": "OK"
                },
                {
                    "SN": "PrHP02",
                    "description": "Printer(second floor)",
                    "status": "OK"
                },
                {
                    "SN": "L0123",
                    "description": "Laptop in storage",
                    "status": "damaged"
                }
            ]
        },
        {
            "building": "B5",
            "addressing": "32 Powell St, Bowral",
            "inventory": [
                {
                    "SN": "SerD23",
                    "description": "Server",
                    "status": "OK"
                },
```

```
                {
                    "SN": "CoHP125",
                    "description": "Personal computer",
                    "status": "repair"
                }
            ]
        }
    ],
    "Date": "31/12/2021"
}
```

Task 3 readjson

Q3. Write a html file (A4-Task3-**StudentName-StudentNumber**.html) with one button "Read JSON".

- When a user clicks the button, an AJAX call will be made to get the JSON file (inventory list) created in A04-Task2.
- Received JSON should be parsed into a JavaScript object and the JavaScript object should be displayed on the webpage in the following format:


```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang 7350752</title>
    <script>
        function getInventoryList() {
            var xhttp = new XMLHttpRequest();
            xhttp.onreadystatechange = function () {
                if (xhttp.readyState == XMLHttpRequest.DONE && xhttp.status == 2
```

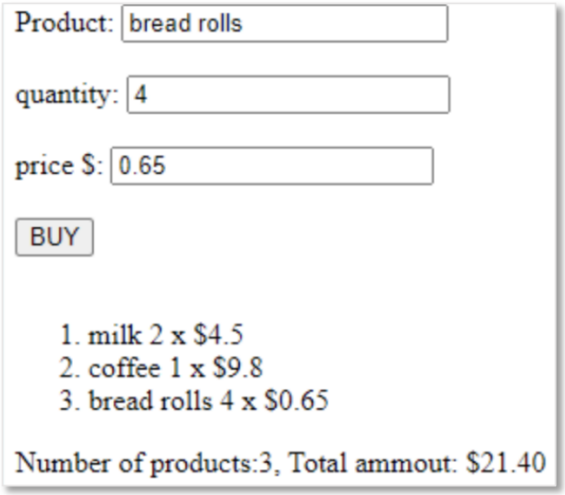
```
                    var inventoryList = JSON.parse(xhttp.responseText);
                    var inventoryEle = document.getElementById("inventory");
                    var html =`<b>INVENTORY LIST</b><br>`;
                    html += `<font color="red">${inventoryList.studentName} ${in
                    html += `<br>${inventoryList.Date}<br>`;
                    for (let index = 0; index < inventoryList.inventoryList.leng
                        const item = inventoryList.inventoryList[index];
                        var tmp = `<br>${item.building} - ${item.addressing}<br>
                        for (let i = 0; i < item.inventory.length; i++) {
                            const ele = item.inventory[i];
                            tmp += `*${ele.SN} - ${ele.description} - ${ele.stat
                        }
                        if (index != inventoryList.inventoryList.length - 1) {
                            tmp += "<hr>"
                        }
                        html += tmp;
                    }
                    inventoryEle.innerHTML = html;
                }
            }
            xhttp.open("GET", "A4-Task2-Kama Wang-7350752.json");
            xhttp.send();
        }
    </script>
<body>
    <button onclick="getInventoryList()">Read JSON</button> <br> <br>
    <div id="inventory"></div>
</body>
</html>

```

Task 4 JS写html

Q4. Create a webpage (A4-Task4-**StudentName-StudentNumber**.html) that will simulate "product scanner".

- The webpage should display 3 text fields (product, quantity, price) and a button "BUY".
- The user can enter information and click the ”BUY” button, after which the entered data is displayed in (added to) an ordered list.
- At the end of the list, the number of entered products and the total amount are displayed.




```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Kama Wang 7350752</title>
    <script>
        var orderNum = 0;
        var totalCost = 0;
        function addOrder() {
            product = document.getElementById("product").value;
            quantity = Number(document.getElementById("quantity").value);
            price = Number(document.getElementById("price").value);
            orderNum += 1;
            totalCost += quantity * price;
            var orderInfo = product + " " + quantity + " x " + "$" + price;
            var li = document.createElement("li");
            var orderText = document.createTextNode(orderInfo);
            li.appendChild(orderText);
            var orderUL = document.getElementById("orderHolder");
            orderUL.appendChild(li);

            var orderNumEle = document.getElementById("orderNum");
            orderNumEle.innerHTML = orderNum;
            var totalCostEle = document.getElementById("totalCost");
            totalCostEle.innerHTML = totalCost.toFixed(2);
        }
    </script>    aq
```

```
</head>
<body>
    Product: <input type="text" id="product"> <br>
    quantity: <input type="text" id="quantity"> <br>
    price $: <input type="text" id="price"> <br>
    <button onclick="addOrder()">BUY</button> <br>
    <ol id="orderHolder"></ol>
    <p>Number of products:<span id="orderNum">0</span>, Total ammount: $<span id
</body>
</html>
```

JSON	XML
JSON 是一种数据格式	XML 是一种标记语言
与 XML 相比，JSON 数据更容易阅读	XML 文档相对来说阅读起来比较困难
JSON 数据可以存储在 .json 格式的文本文件中	XML 数据可以存储在 .xml 格式的文本文件中
JSON 中支持字符串、数字、数组、布尔值等类型	XML 中只有字符串类型
JSON 没有显示功能	XML 提供了显示数据的能力，因为它是一种标记语言
JSON 仅支持 UTF-8 编码	XML 支持各种编码
JSON 不支持注释	XML 支持注释
JSON 不支持命名空间	XML 支持命名空间
JSON 读写速度更快，且更容易解析	相对于 JSON，XML 数据结构更加复杂，解析速度相对较慢
相对于 XML，JSON 的安全性较低	相对于 JSON，XML 的安全性更高