



GIFT School of Engineering and Applied Sciences

Fall 2022

**CS-120 Introduction to Information and
Communication Technology**

Lab-09 Manual

Creating Layouts

v1
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Introduction to Lab 09:

This Lab includes the following concepts for creating layouts

- Block Level and inline HTML Elements
- HTML div Element
- HTML Links
- Navigation Bar

Learning Outcomes

At the end of this lab, student will be able to learn

- What are Block Level and Inline HTML Elements
- HTML div Element
- How to create simple HTML Layout using div and inline styling.
- HTML Links.
- How to create a navigation bar using list element and inline styling.

1. Block Level and Inline HTML Elements.

An **inline element** does not start on a new line and only takes up as much width as necessary. Example tag is ``

```
<span>My</span>
```

```
<span>Name</span>
```

Display of a **block-level** element always starts on a new line and takes up the full width available. Examples are paragraph tag `<p>` and headings tags.

Whenever, we write new paragraph in html, it always starts on new line.

2. HTML div Element

HTML div is division tag `<div>`. This tag is used as container for other tags. We can create different HTML Layouts using div element along with CSS styling. We know only inline styling at this time. Let's use this inline styling and div element to create a Layout.

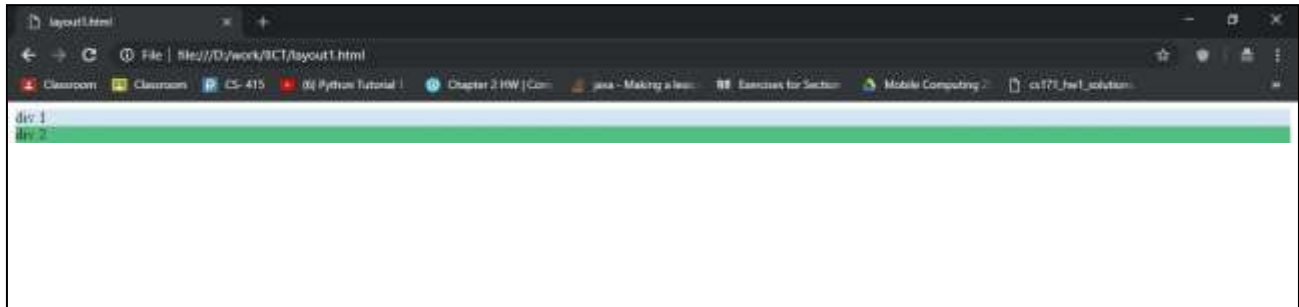
Perform the following:

1. Open your editor.
2. Create a webpage page with name "`Layout1.html`"
3. Write code for basic HTML Structure. (doctype, html, head,title, body)
4. Now Inside body tag create a div tag as:

```
<div style="background-color:#D4E6F1">Div 1</div>
```

5. Now create second div tag as:

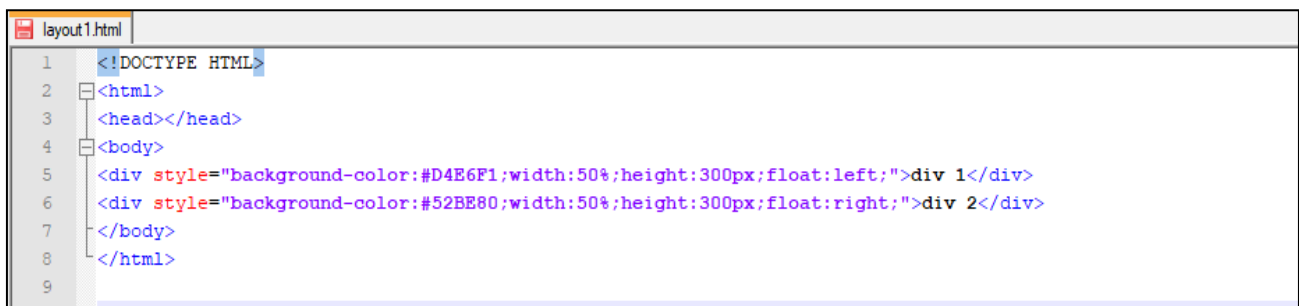
```
<div style="background-color: #52BE80">Div 2</div>
```



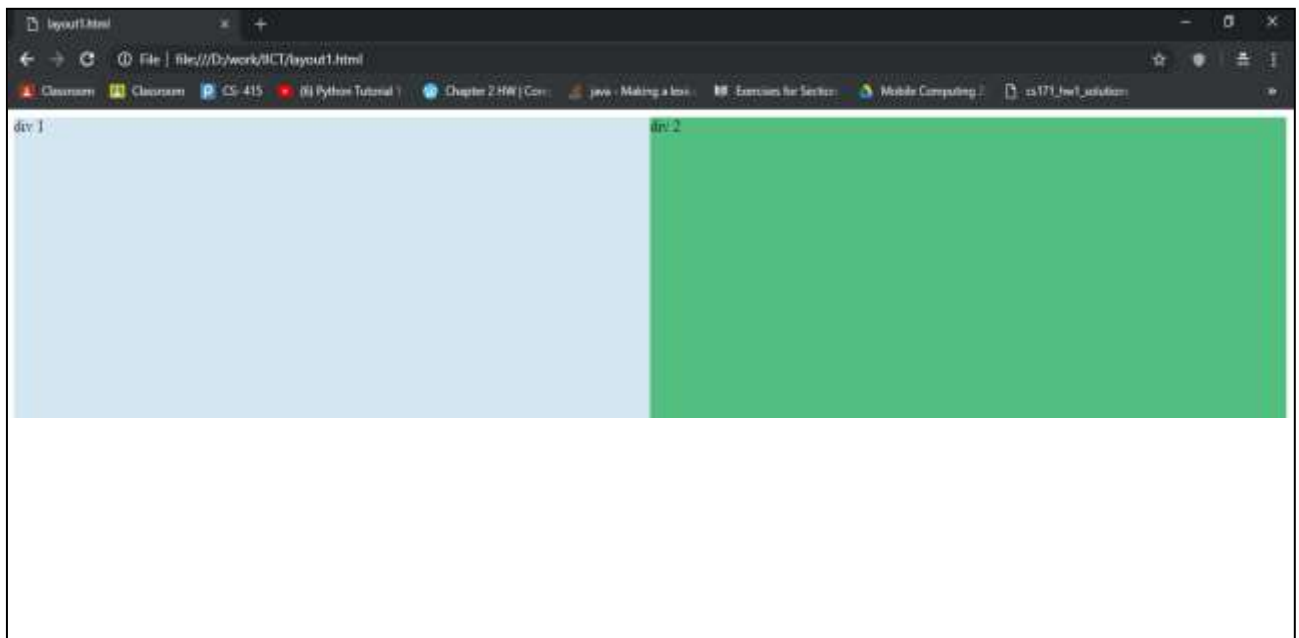
As div is block Level Element, the second div is displayed in next line.

6. Now add style to both div elements.

- Set width 50%.
- Align both on same line.
- Set height to 300px.

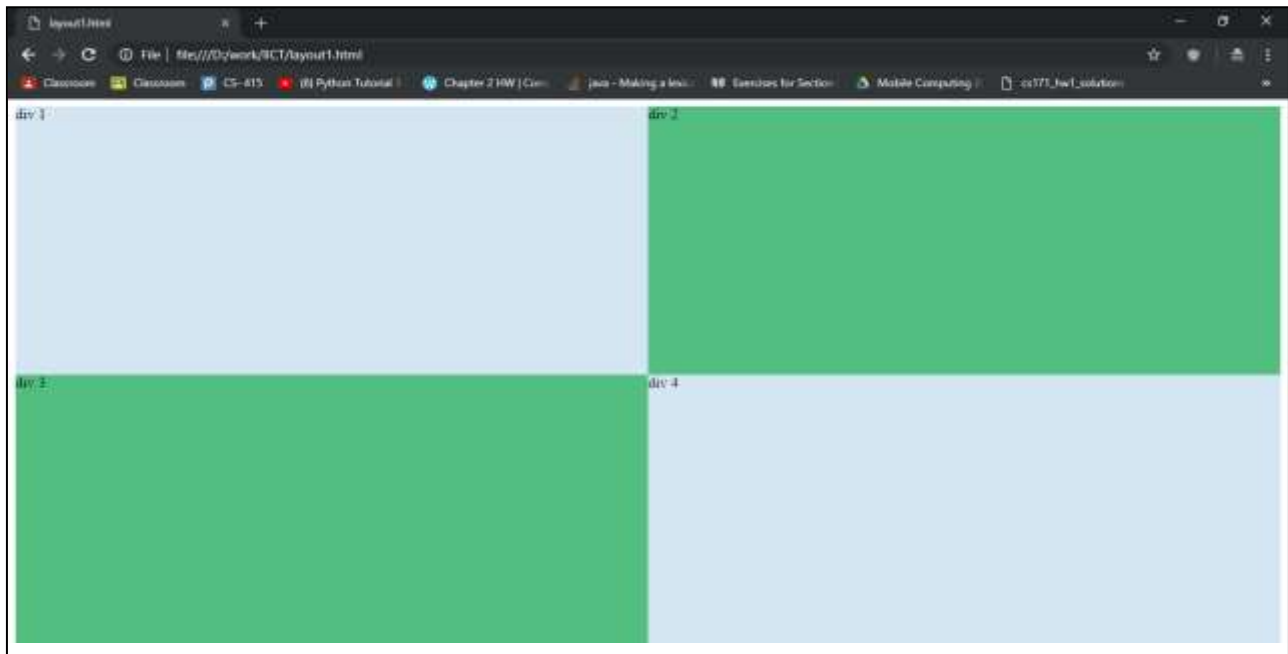


This will add some style to your div elements.



7. Add two more div elements.
8. Give them same style.
9. Swap their Colors.

The Page will look like following:



Lets add some content in the div Elements.

10. Place a picture in div 1 and align it to center give it proper height and width.

```

```

11. Place a picture in div 3 and align it to center give it proper height and width.

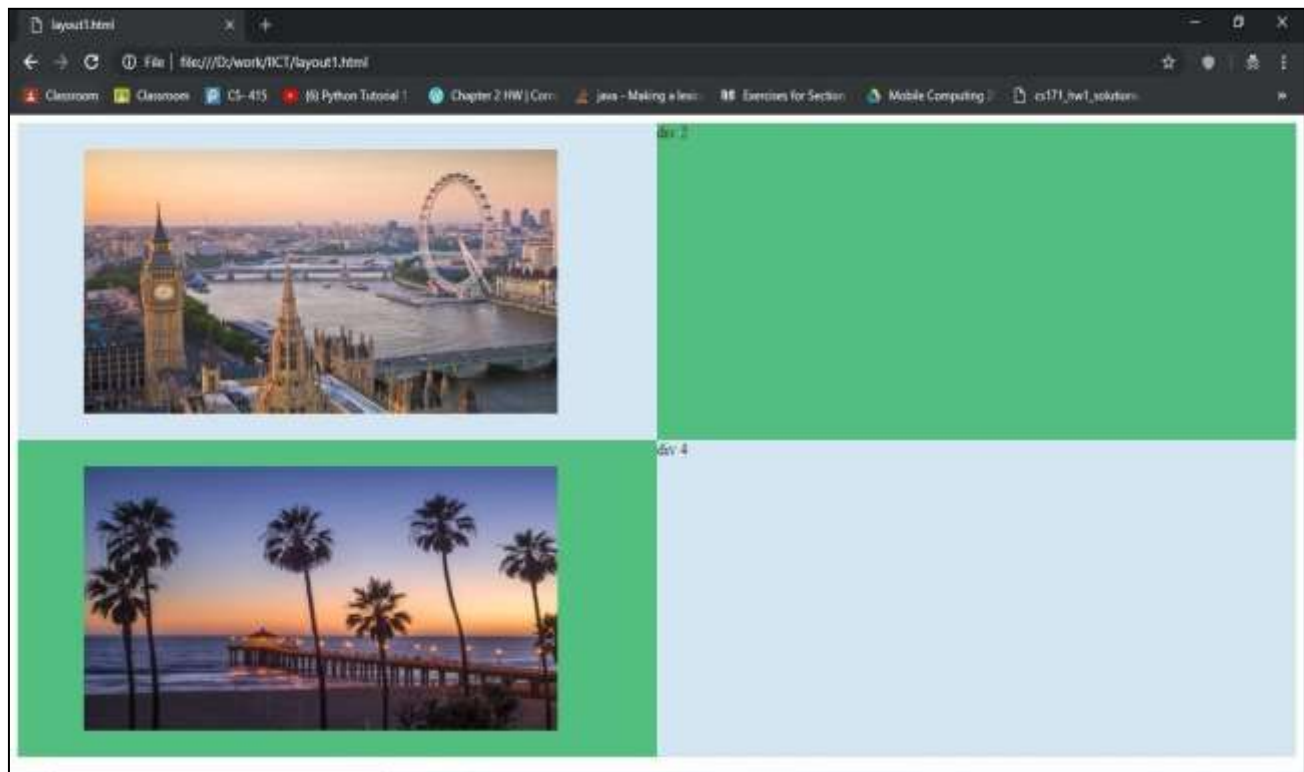
```

```

The code will be like this:

```
layout1.html
1 <!DOCTYPE HTML>
2 <html>
3 <head></head>
4 <body>
5 <div style="background-color:#D4E6F1;width:50%;height:300px;float:left;">
6
7 
8
9 </div>
10 <div style="background-color:#52B880;width:50%;height:300px;float:right;">div 2</div>
11
12 <div style="background-color:#52B880;width:50%;height:300px;float:left;">
13
14 
15
16 </div>
17 <div style="background-color:#D4E6F1;width:50%;height:300px;float:right;">div 4</div>
18
19 </body>
20 </html>
21
```

The Page output will be like following:



Now add some content in div 2 and div 4.

12. Write something in div 2 about the picture displayed in div 1.
13. Write something in div 4 about the picture displayed in div 3.

```

<body>
<div style="background-color:#D4E6F1;width:50%;height:300px;float:left;">



</div>
<div style="background-color:#52B880;width:50%;height:300px;float:right;">
<h1 style="margin-left:20px;">London</h1>
<p style="margin-left:20px;">London, the capital of England and the United Kingdom, is a 21st-century city with history stretching back to Roman times. <br>
At its centre stand the imposing Houses of Parliament, the iconic 'Big Ben' clock tower and Westminster Abbey, site of British monarch coronations. <br>
Across the Thames River, the London Eye observation wheel provides panoramic views of the South Bank cultural complex, and the entire city.</p>
</div>

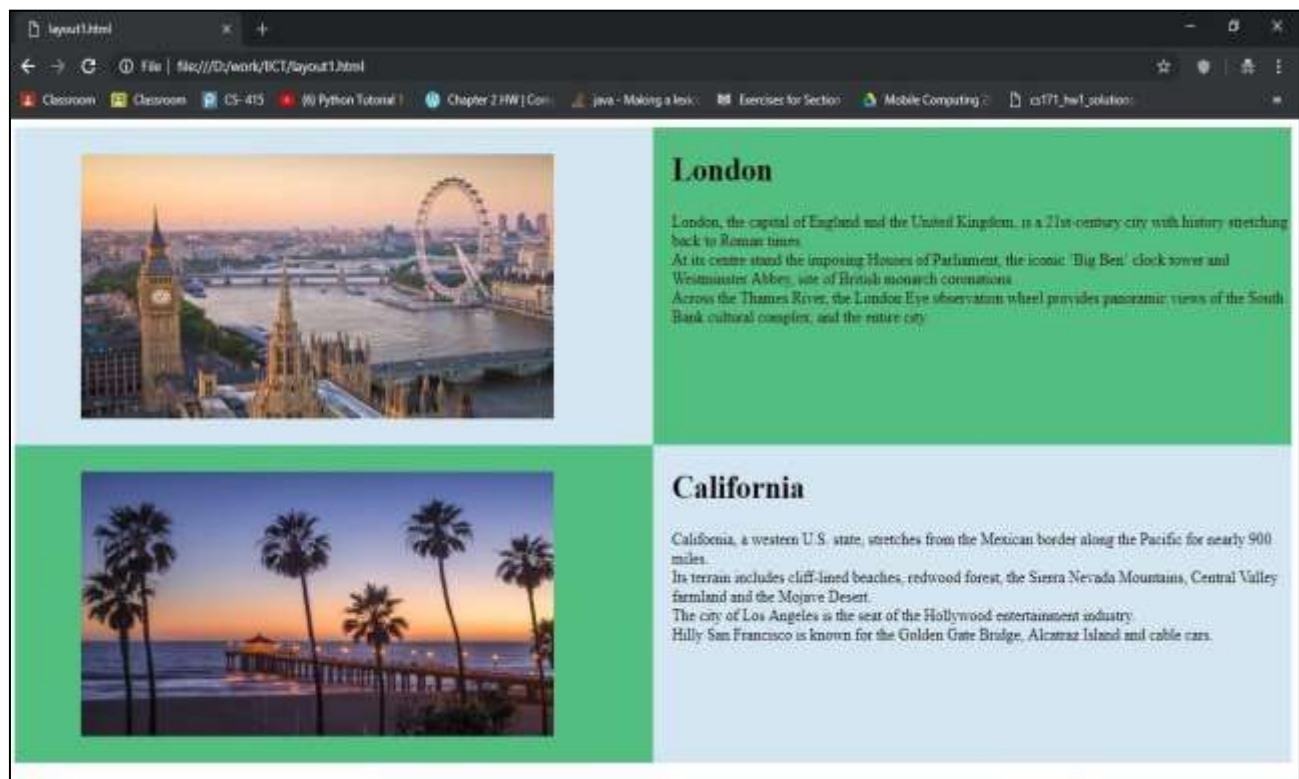
<div style="background-color:#52B880;width:50%;height:300px;float:left;">



</div>
<div style="background-color:#D4E6F1;width:50%;height:300px;float:right;">
<h1 style="margin-left:20px;">California</h1>
<p style="margin-left:20px;">California, a western U.S. state, stretches from the Mexican border along the Pacific for nearly 900 miles.<br>
Its terrain includes cliff-lined beaches, redwood forest, the Sierra Nevada Mountains, Central Valley farmland and the Mojave Desert.<br>
The city of Los Angeles is the seat of the Hollywood entertainment industry. <br>
Hilly San Francisco is known for the Golden Gate Bridge, Alcatraz Island and cable cars.</p>
</div>

```

The output will be like following:



The page looks better than the pages we created before.

Using div and CSS styles we can create very good and attractive layouts for our web pages.

3. HTML Links

In a Website, there are multiple Webpages. User navigates from page to page using links.

In HTML, link tag is anchor tag `<a>`

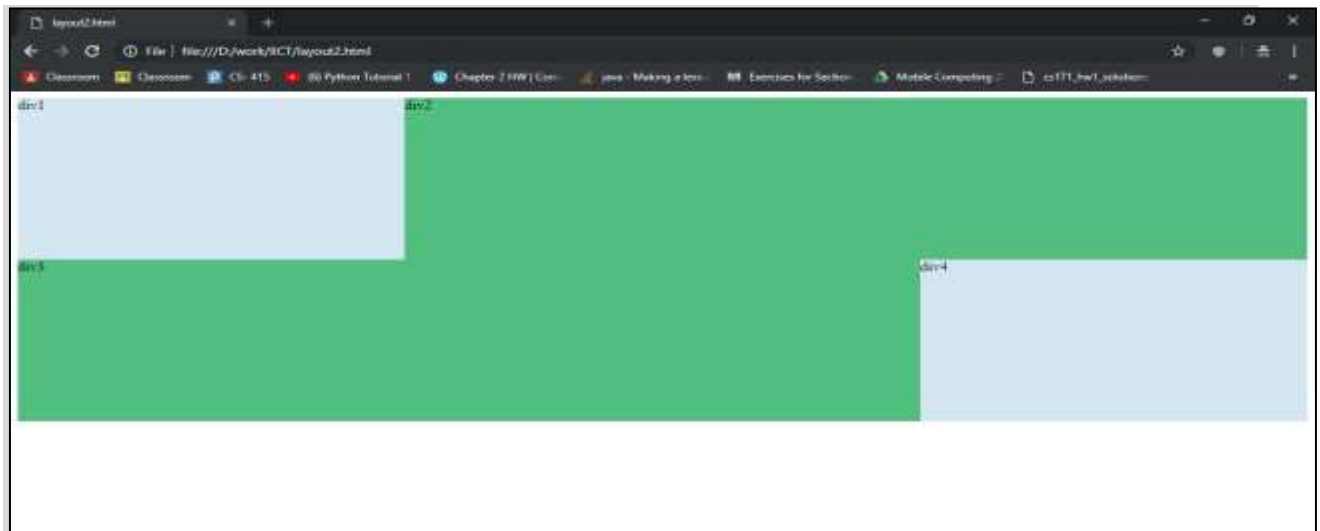
1. Now add a link in page “layout1.html” in div 4 as:

```
<br>
<center><a href=#>Next</a></center>
```

Attribute href tells where this link will take you. As we have not created any other page yet. We have set the value of href to “#” which means go no where.

2. Now create webpage “Layout2.html”
3. Create a good layout in that page using div and inline styling.
4. Now set the value of href to “layout2.html”
5. Now click the link, The browser will open next page.

Upon clicking link the page created by us looks like following:



4. Navigation Bar

When you visit websites. There is always a navigation bar on the top of the websites that has links to other pages (Home, Services, contact)

We will create a simple navigation bar using list and inline styling.

1. In the page “Layout1.html”, add an unordered list at the top.

```
<ul style="list-style-type:none;">
<li>Home</li>
<li>Services</li>
</ul>
```

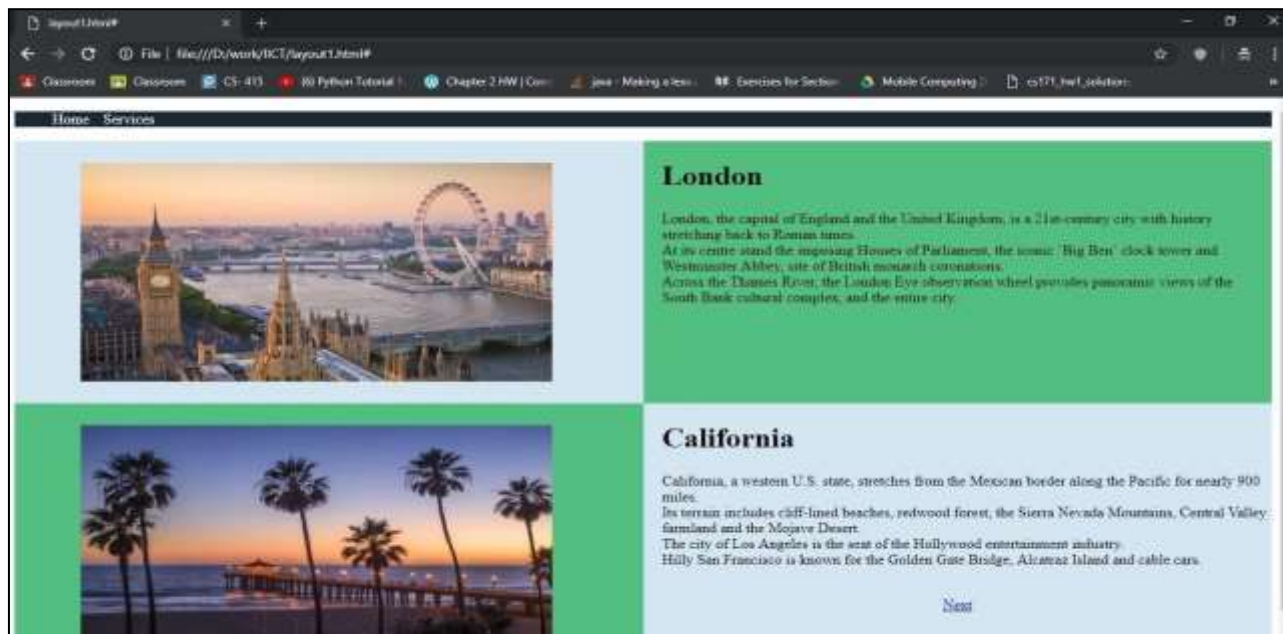
2. As the List items will be links, add <a> tag in list items.

```
<ul style="list-style-type:none;">
<li><a href=#>Home</a></li>
<li><a href=#>Services</a></li>
</ul>
```

3. In navigation bar the items are on same line and there is a background color. Now add remaining style as:

```
<ul style="list-style-type:none;background-color:#1C2833;overflow:hidden;">
<li style="float:left;"><a href=# style="text-decoration:none;color:white;">Home</a></li>
<li style="float:left;margin-left:15px;"><a href=# style="text-decoration:none;color:white;">Services</a></li>
</ul>
```

This will make a navigation bar on the top of the page.



Now you know How to create a website with a navigation bar and a good Layout.