- 9) Develop jQuery script (with HTML/CSS) for:
- a. Appends the content at the end of the existing paragraph and list.
- b. Change the state of the element with CSS style using animate() method
- c. Change the color of any div that is animated.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>jQuery Append, Animate, and Color Change Demo</title>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<style>
body {
font-family: Arial, sans-serif;
line-height: 1.6;
margin: 0;
padding: 20px;
background-color: #f4f4f4;
```

```
.container {
max-width: 800px;
margin: auto;
background: white;
padding: 20px;
border-radius: 5px;
box-shadow: 0 0 10px rgba(0,0,0,0.1);
h1, h2 {
color: #333;
.box {
width: 100px;
height: 100px;
background-color: #3498db;
margin: 20px 0;
button {
padding: 10px 15px;
background-color: #2ecc71;
color: white;
border: none;
```

```
border-radius: 5px;
cursor: pointer;
margin-right: 10px;
button:hover {
background-color: #27ae60;
</style>
</head>
<body>
<div class="container">
<h1>jQuery Demonstration</h1>
<h2>a. Append Content</h2>
This is an existing paragraph. 
Existing item 1
Existing item 2
<button id="appendButton">Append Content</button>
<h2>b. Animate Element</h2>
<div id="animateBox" class="box"></div>
<button id="animateButton">Animate Box</button>
```

```
<h2>c. Change Color of Animated Div</h2>
<div id="colorBox" class="box"></div>
<button id="colorAnimateButton">Animate and Change Color</button>
</div>
<script>
$(document).ready(function() {
// a. Append content
$("#appendButton").click(function() {
$("#existingParagraph").append("This content is appended.");
$("#existingList").append("Appended item");
});
// b. Animate element
$("#animateButton").click(function() {
$("#animateBox").animate({
width: "200px",
height: "200px",
opacity: 0.5
}, 1000);
});
// c. Animate and change color
$("#colorAnimateButton").click(function() {
$("#colorBox").animate({
```

```
width: "200px",
height: "200px"
}, {
duration: 1000,
step: function(now, fx) {
if (fx.prop === "width") {
$(this).css("background-color", `rgb(${Math.round(now)}, 52, 219)`);
}
});
});
});
</script>
</body>
</html>
```