```
5-HTML
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Responsive Image Gallery</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <div class="gallery">
        <img
src="https://images.unsplash.com/photo-1731865274308-d98c94287603?q=80&w=1864&auto=f
ormat&fit=crop&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHx8fA%3D
%3D" alt="Image 2">
        <img
src="https://images.unsplash.com/photo-1731848558736-45b827aa65d3?w=500&auto=format&
fit=crop&q=60&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDI1fE04alZiTGJUUndzfH
xlbnwwfHx8fHw%3D" alt="Image 3">
        <img
src="https://images.unsplash.com/photo-1731889043744-f8e5cf5286d6?w=500&auto=format&
fit=crop&q=60&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDEyfE04alZiTGJUUndzfH
xlbnwwfHx8fHw%3D" alt="Image 4">
        <img
src="https://images.unsplash.com/photo-1732020283419-38e938352c3c?w=500&auto=format&
fit=crop&q=60&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDR8TThqVmJMYlRSd3N8fG
VufDB8fHx8fA%3D%3D" alt="Image 5">
        <img
src="https://images.unsplash.com/photo-1732053860376-b620f02baac6?w=500&auto=format&
fit=crop&q=60&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDd8TThqVmJMYlRSd3N8fG
VufDB8fHx8fA%3D%3D" alt="Image 6">
    </div>
</body>
</html>
-----------------------------------------------------------------------------
5-CSS
* {
    box-sizing: border-box;
    margin: 0;
    padding: 0;
}
body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
}
.gallery {
    display: grid;
    grid-template-columns: repeat(auto-fill, minmax(250px, 1fr));
    gap: 10px;
    padding: 20px;
```

```
}
.gallery img {
    width: 100%;
    height: auto;
    border-radius: 8px;
    transition: transform 0.2s;
}
.gallery img:hover {
    transform: scale(1.05);
}
```

6-HTML
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Medium Clone</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <div class="logo">Medium Clone</div>
        <nav>
            <ul>
                <li><a href="#">Home</a></li>
                <li><a href="#">Stories</a></li>
                <li><a href="#">About</a></li>
                <li><a href="#">Sign In</a></li>
                <li><a href="#" class="btn">Get Started</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section class="hero">
            <h1>Welcome to Medium Clone</h1>
            <p>Your daily dose of articles and stories</p>
            <a href="#" class="btn">Start Reading</a>
        </section>
        <section class="articles">
            <article>
                <h2>Article Title 1</h2>
                <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
                <a href="#">Read more</a>
            </article>
            <article>
                <h2>Article Title 2</h2>
                <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
```

```html
                <a href="#">Read more</a>
            </article>
            <article>
                <h2>Article Title 3</h2>
                <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
                <a href="#">Read more</a>
            </article>
            <article>
                <h2>Article Title 4</h2>
                <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
                <a href="#">Read more</a>
            </article>
        </section>
    </main>
    <footer>
        <p>&copy; 2023 Medium Clone. All rights reserved.</p>
    </footer>
</body>
</html>
```


6-CSS
```css
* {
    box-sizing: border-box;
    margin: 0;
    padding: 0;
}

body {
    font-family: Arial, sans-serif;
    line-height: 1.6;
    background-color: #f7f7f7;
    color: #333;
}

header {
    background: #fff;
    padding: 20px;
    display: flex;
    justify-content: space-between;
    align-items: center;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}

header .logo {
    font-size: 24px;
    font-weight: bold;
}
```

```css
nav ul {
    list-style: none;
    display: flex;
}

nav ul li {
    margin: 0 15px;
}

nav ul li a {
    text-decoration: none;
    color: #333;
}

nav ul li a.btn {
    background: #00ab6b;
    color: #fff;
    padding: 10px 15px;
    border-radius: 5px;
}

.hero {
    background: #00ab6b;
    color: white;
    padding: 50px 20px;
    text-align: center;
}

.articles {
    display: grid;
    grid-template-columns: repeat(auto-fill, minmax(300px, 1fr));
    gap: 20px;
    padding: 20px;
}

article {
    background: white;
    padding: 20px;
    border-radius: 5px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}

article h2 {
    margin-bottom: 10px;
}

article a {
    text-decoration: none;
    color: #00ab6b;
```

```css
}
footer {
    text-align: center;
    padding: 20px;
    background: #fff;
    box-shadow: 0 -2px 5px rgba(0, 0, 0,)}
```


7-HTML

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Space Animation</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="animation-container">
        <div class="animation">
            <img
src="https://th.bing.com/th/id/OIP.e1FBc5v1GSc_FrOpIRGz1gHaHN?rs=1&pid=ImgDetMain"
alt="Astronaut" class="image astronaut">
            <img
src="https://images.pexels.com/photos/73871/rocket-launch-rocket-take-off-nasa-73871
.jpeg?cs=srgb&dl=space-rocket-launching-73871.jpg&fm=jpg" alt="Rocket" class="image
rocket">
            <img
src="https://facts.net/wp-content/uploads/2020/03/AdobeStock_105677222.jpeg"
alt="Space" class="image space">
        </div>
    </div>
</body>
</html>
```


7-CSS

```css
* {
    box-sizing: border-box;
    margin: 0;
    padding: 0;
}

body {
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #000; /* Black background for space effect */
}
```

```css
.animation-container {
    position: relative;
    width: 400px; /* Set a width for the animation */
    height: 400px; /* Set a height for the animation */
    overflow: hidden;
}

.animation {
    position: absolute;
    width: 100%;
    height: 100%;
}

.image {
    position: absolute;
    width: 100%;
    height: 100%;
    opacity: 0;
    animation: fade 9s infinite; /* Adjust duration for the entire animation cycle
*/
}

.astronaut {
    animation-name: fadeAstronaut;
}

.rocket {
    animation-name: fadeRocket;
}

.space {
    animation-name: fadeSpace;
}

@keyframes fadeAstronaut {
    0%, 10% {
        opacity: 1;
    }
    30%, 100% {
        opacity: 0;
    }
}

@keyframes fadeRocket {
    10%, 40% {
        opacity: 1;
    }
    60%, 100% {
        opacity: 0;
```

```css
        }
}

@keyframes fadeSpace {
    40%, 70% {
        opacity: 1;
    }
    80%, 100% {
        opacity: 0;
    }
}
```


8-HTML
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Logical question</title>
</head>
<body>
    <script src="script.js"></script>
    <h1>logical question</h1>
</body>
</html>
```


8-JS
```javascript
// MAP
const numbers = [1, 2, 3, 4, 5];

const squares = numbers.map(num => num * num);

console.log(squares);


 // FILTER
 const numbers1 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

const evenNumbers = numbers1.filter(num => num % 2 === 0);

console.log(evenNumbers);


// REDUCE
const number = [1, 2, 3, 4, 5];

const sum = number.reduce((accumulator, currentValue) => accumulator + currentValue,
0);
```

```
    console.log(sum);


// FOREACH
const names = ['Alice', 'Bob', 'Charlie', 'David'];

names.forEach(name => {
    console.log(name);
});
```


9-HTML
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Immediate & Invoked</title>
</head>
<body>
    <script src="script.js"></script>
    <h1>Immediate & Invoked</h1>
</body>
</html>
```


9-JS
```js
function createCounter() {
    let count = 0;
    return function() {
        count++;
        return count;
    };
}
const counter = createCounter();
console.log(counter());
console.log(counter());
console.log(counter());

// IIFE
const myModule = (function() {
    let privateVariable = 'I am private';
    return {
        getPrivateVariable: function() {
            return privateVariable;
        }
    };
})();
console.log(myModule.getPrivateVariable());
```

```
console.log(myModule.privateVariable);

// SCOPE
var x = 10;
function outerFunction() {
    var x = 20;
    function innerFunction() {
        console.log(x);
    }
    innerFunction();
}
outerFunction();
```