```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11     }
12   </style>
13   <style>
14     /*********************
15        애니메이션 제작
16     ********************/
17     /* (1) 키프레임 생성
18         @keyframes 애니메이션이름 {
19           전체진행시간에 대한 비율 { 변경내용 }
20         }
21     */
22     @keyframes bgchange {
23       0% { background-color: red; }
24       100% { background-color: blue; }
25     }
26
27     /* (2) 애니메이션 생성과 적용 */
28     .box {
29       animation-name: bgchange;
30       animation-duration: 6s;
31     }
32   </style>
33 </head>
34 <body>
35   <div class="box"></div>
36 </body>
37 </html>
```

01_애니메이션기본-2.html

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11     }
12   </style>
13   <style>
14     /*********************
15       애니메이션 제작
16     ********************/
17     /* (1) 키프레임 생성
18         @keyframes 애니메이션이름 {
19           전체진행시간에 대한 비율 { 변경내용 }
20         }
21     */
22     @keyframes bgchange {
23       0% { background-color: red; }
24       50% { background-color: black; }
25       100% { background-color: blue; }
26     }
27
28     /* (2) 애니메이션 생성과 적용 */
29     .box {
30       /* animation-name: bgchange;
31       animation-duration: 6s; */
32       animation: bgchange 6s;
33     }
34   </style>
35 </head>
36 <body>
37   <div class="box"></div>
38 </body>
39 </html>
```

```
 1  <!DOCTYPE html>
 2  <html lang="ko">
 3  <head>
 4    <meta charset="UTF-8">
 5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
 6    <title>애니메이션</title>
 7    <style>
 8      .box {
 9        width: 100px; height: 100px;
10        background-color: red;
11      }
12    </style>
13    <style>
14      /*********************
15        애니메이션 제작
16      ********************/
17      /* (1) 키프레임 생성
18          @keyframes 애니메이션이름 {
19            전체진행시간에 대한 비율 { 변경내용 }
20          }
21      */
22      @keyframes bgchange {
23        0% { background-color: gold; }
24        50% { background-color: black; }
25        100% { background-color: blue; }
26      }
27
28      /* (2) 애니메이션 생성과 적용 */
29      .box {
30        /* animation-name: bgchange;
31        animation-duration: 6s; */
32        animation: bgchange 6s;
33        animation-delay: 2s;  /* 대기시간 */
34      }
35    </style>
36  </head>
37  <body>
38    <div class="box"></div>
39  </body>
40  </html>
```

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11     }
12   </style>
13   <style>
14     /*********************
15        애니메이션 제작
16     ********************/
17     /* (1) 키프레임 생성
18         @keyframes 애니메이션이름 {
19           전체진행시간에 대한 비율 { 변경내용 }
20         }
21     */
22     @keyframes bgchange {
23       0% { background-color: gold; }
24       50% { background-color: black; }
25       100% { background-color: blue; }
26     }
27
28     /* (2) 애니메이션 생성과 적용 */
29     .box {
30       /* animation-name: bgchange;
31       animation-duration: 6s; */
32       animation: bgchange 6s;
33       animation-delay: 1s;  /* 대기시간 */
34       animation-iteration-count: infinite;
35     }
36   </style>
37 </head>
38 <body>
39   <div class="box"></div>
40 </body>
41 </html>
```

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11     }
12   </style>
13   <style>
14     /*********************
15       애니메이션 제작
16     ********************/
17     /* (1) 키프레임 생성
18         @keyframes 애니메이션이름 {
19           전체진행시간에 대한 비율 { 변경내용 }
20         }
21     */
22     @keyframes bgchange {
23       0% { background-color: red; }
24       12.5% { background-color: orange; }
25       25% { background-color: yellow; }
26       37.5% { background-color: green; }
27       50% { background-color: blue; }
28       62.5% { background-color: navy; }
29       75% { background-color: indigo; }
30       100% { background-color: red; }
31     }
32
33     /* (2) 애니메이션 생성과 적용 */
34     .box {
35       /* animation-name: bgchange;
36       animation-duration: 6s; */
37       animation: bgchange 6s;
38       animation-delay: 1s;  /* 대기시간 */
39       animation-iteration-count: infinite;
40       animation-direction: alternate;
41     }
42   </style>
43  </head>
44  <body>
45    <div class="box"></div>
46  </body>
47  </html>
```

05_인터랙션.html

```
 1  <!DOCTYPE html>
 2  <html lang="ko">
 3  <head>
 4    <meta charset="UTF-8">
 5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
 6    <title>애니메이션</title>
 7    <style>
 8      .box {
 9        width: 100px; height: 100px;
10        background-color: red;
11      }
12    </style>
13    <style>
14      /*********************
15        애니메이션 제작
16      ********************/
17      /* (1) 키프레임 생성
18          @keyframes 애니메이션이름 {
19            전체진행시간에 대한 비율 { 변경내용 }
20          }
21      */
22      @keyframes change {
23        0% { background-color: red; }
24        12.5% {
25          background-color: orange;
26          width: 200px;
27        }
28        25% {
29          background-color: yellow;
30          width: 200px; height: 200px;
31        }
32        37.5% {
33          background-color: green;
34          width: 200px; height: 300px;
35        }
36        50% {
37          background-color: blue;
38          width: 100px; height: 300px;
39        }
40        62.5% {
41          background-color: navy;
42          width: 100px; height: 200px;
43        }
44        75% {
45          background-color: indigo;
46          width: 100px; height: 300px;
47        }
48        100% { background-color: red; }
49      }
50
51      /* (2) 애니메이션 생성과 적용 */
52      .box {
53        animation: change 6s;
54        animation-delay: 1s;  /* 대기시간 */
55        animation-iteration-count: infinite;
56        animation-direction: alternate;
57      }
58    </style>
59  </head>
60  <body>
61    <div class="box"></div>
62  </body>
63  </html>
```

06_위치이동.html

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11
12       position: relative;
13     }
14   </style>
15   <style>
16     /*********************
17       애니메이션 제작
18     *********************/
19     /* (1) 키프레임 생성
20         @keyframes 애니메이션이름 {
21           전체진행시간에 대한 비율 { 변경내용 }
22         }
23     */
24     @keyframes change {
25       0% {
26         background-color: red;
27         top: 0; left: 0;
28       }
29       12.5% {
30         background-color: orange;
31         width: 200px;
32         left: 100px;
33       }
34       25% {
35         background-color: yellow;
36         width: 200px; height: 200px;
37         left: 100px; top: 100px;
38       }
39       37.5% {
40         background-color: green;
41         width: 200px; height: 300px;
42         left: 100px; top: 200px;
43       }
44       50% {
45         background-color: blue;
46         width: 100px; height: 300px;
47         left: 200px; top: 200px;
48       }
49       62.5% {
50         background-color: navy;
51         width: 100px; height: 200px;
52         left: 300px; top: 200px;
53       }
54       75% {
55         background-color: indigo;
56         width: 100px; height: 300px;
57         left: 150px; top: 100px;
58       }
59       100% {
60         background-color: red;
61         left: -200px; top: 100px;
62       }
63     }
64
65     /* (2) 애니메이션 생성과 적용 */
```

06_위치이동.html

```
66        .box {
67          animation: change 6s;
68          animation-delay: 1s;   /* 대기시간 */
69          animation-iteration-count: infinite;
70          animation-direction: alternate;
71          animation-timing-function: linear;/* easing 효과 */
72        }
73      </style>
74    </head>
75    <body>
76      <div class="box"></div>
77    </body>
78  </html>
```

07_마지막상태유지.html

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .box {
9        width: 100px; height: 100px;
10       background-color: red;
11
12       position: relative;
13     }
14   </style>
15   <style>
16     /*********************
17       애니메이션 제작
18     *********************/
19     /* (1) 키프레임 생성
20         @keyframes 애니메이션이름 {
21           전체진행시간에 대한 비율 { 변경내용 }
22         }
23     */
24     @keyframes change {
25       0% {
26         background-color: red;
27         top: 0; left: 0;
28       }
29       12.5% {
30         background-color: orange;
31         width: 200px;
32         left: 100px;
33       }
34       25% {
35         background-color: yellow;
36         width: 200px; height: 200px;
37         left: 100px; top: 100px;
38       }
39       37.5% {
40         background-color: green;
41         width: 200px; height: 300px;
42         left: 100px; top: 200px;
43       }
44       50% {
45         background-color: blue;
46         width: 100px; height: 300px;
47         left: 200px; top: 200px;
48       }
49       62.5% {
50         background-color: navy;
51         width: 100px; height: 200px;
52         left: 300px; top: 200px;
53       }
54       75% {
55         background-color: indigo;
56         width: 100px; height: 300px;
57         left: 150px; top: 100px;
58       }
59       100% {
60         background-color: red;
61         left: -200px; top: 100px;
62       }
63     }
64
65     /* (2) 애니메이션 생성과 적용 */
```

07_마지막상태유지.html

```
66      .box {
67        animation: change 6s;
68        animation-delay: 1s;  /* 대기시간 */
69
70        animation-timing-function: linear;/* easing 효과 */
71        animation-fill-mode: forwards;
72      }
73    </style>
74  </head>
75  <body>
76    <div class="box"></div>
77  </body>
78  </html>
```

08_애니메이션활용-1.html

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      * { margin: 0; padding: 0; }
9      .box {
10       width: 100px; height: 100px;
11       background-color: gold;
12       position: absolute;
13       top: 50%; margin-top: -50px;
14       left: 50%; margin-left: -50px;
15     }
16     /* (1) 키프레임 생성 */
17     @keyframes mov {
18       0% {
19         width: 100px; height: 100px;
20         background-color: gold;
21       }
22       25% {
23         width: 200px; height: 200px;
24         background-color: #060;
25         border-radius: 50%;
26         margin-left: -100px; margin-top: -100px;
27       }
28       50% {
29         width: 300px; height: 300px;
30         background-color: #cd0;
31         border-radius: 0;
32         margin-left: -150px; margin-top: -150px;
33       }
34       75% {
35         width: 200px; height: 200px;
36         background-color: #0c0;
37         border-radius: 50%;
38         margin-left: -100px; margin-top: -100px;
39       }
40       100% {
41         width: 100px; height: 100px;
42         background-color: gold;
43       }
44     }
45
46     /* (2) 애니메이션 생성 및 적용 */
47     .box { animation: mov 8s infinite; }
48   </style>
49 </head>
50 <body>
51   <div class="box"></div>
52 </body>
53 </html>
```

08_애니메이션활용-2.html

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      * { margin: 0; padding: 0; }
9      .box {
10       width: 100px; height: 100px;
11       background-color: gold;
12       position: absolute;
13       top: 50%; margin-top: -50px;
14       left: 50%; margin-left: -50px;
15     }
16     /* (1) 키프레임 생성 */
17     @keyframes mov {
18       0% {
19         width: 100px; height: 100px;
20         background-color: gold;
21       }
22       25% {
23         width: 200px; height: 200px;
24         background-color: #060;
25         border-radius: 50%;
26         margin-left: -100px; margin-top: -100px;
27       }
28       50% {
29         width: 300px; height: 300px;
30         background-color: #cd0;
31         border-radius: 0;
32         margin-left: -150px; margin-top: -150px;
33       }
34       75% {
35         width: 200px; height: 200px;
36         background-color: #0c0;
37         border-radius: 50%;
38         margin-left: -100px; margin-top: -100px;
39       }
40       100% {
41         width: 100px; height: 100px;
42         background-color: gold;
43       }
44     }
45
46     /* (2) 애니메이션 생성 및 적용 */
47     .box { animation: mov2 4s infinite alternate; }
48   </style>
49   <style>
50     @keyframes mov2 {
51       50% {
52         background-color: yellowgreen;
53         transform: scale(2) rotate(765deg);
54       }
55       100% {
56         background-color: coral;
57         transform: scale(3) rotate(-765deg);
58       }
59     }
60   </style>
61 </head>
62 <body>
63   <div class="box"></div>
64 </body>
65 </html>
```

08_애니메이션활용-3.html

```html
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .frame {
9        border: 1px solid red;
10       position: relative;
11       height: 500px;
12       overflow: hidden;
13     }
14     .box {
15       width: 100px; height: 100px;
16       background-color: gold;
17       position: absolute;
18       top: 0; left: 0;
19     }
20     @keyframes move {
21       0% {
22         width: 100px; height: 100px;
23         background-color: gold;
24         top: 0; left: 0;
25         transform: scale(1) rotate(0deg);
26       }
27       100% {
28         border-radius: 50%;
29         background-color: crimson;
30         top: 100%; left: 100%;
31         transform: scale(3) rotate(720deg);
32       }
33     }
34     .box {
35       animation: move 5s 1s linear infinite;
36     }
37   </style>
38 </head>
39 <body>
40   <div class="frame">
41     <div class="box"></div>
42   </div>
43 </body>
44 </html>
```

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>애니메이션</title>
7    <style>
8      .frame {
9        border: 1px solid red;
10       position: relative;
11       height: 500px;
12       overflow: hidden;
13     }
14     .box {
15       width: 100px; height: 100px;
16       background-color: gold;
17       position: absolute;
18       top: 100%; left: 0;
19       border-radius: 50%;
20     }
21     @keyframes move {
22       0% { left: -50px; }
23       40% { top: 0; left: 50%; margin-left: -50px;
24         box-shadow: 0 0 0 red;
25       }
26       50% { top: 0; left: 50%; margin-left: -50px;
27         box-shadow: 0 0 100px red;
28       }
29       70% {
30         box-shadow: 0 0 0 red;
31       }
32       100% {
33         top: 100%; left: 100%;
34       }
35     }
36     .box {
37       animation: move 10s 1s linear infinite;
38     }
39   </style>
40 </head>
41 <body>
42   <div class="frame">
43     <div class="box"></div>
44   </div>
45 </body>
46 </html>
```

```
 1  <!DOCTYPE html>
 2  <html lang="ko">
 3  <head>
 4    <meta charset="UTF-8">
 5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
 6    <title>애니메이션</title>
 7    <style>
 8      html, body { height: 100%; }
 9      .obj {
10        width: 200px; height: 200px;
11        background-color: crimson;
12      }
13      .frame {
14        width: 400px; height: 400px;
15        background-color: beige;
16      }
17    </style>
18    <style>
19      .box1 { border-radius: 0 200px; }
20      .box2 { border-radius: 200px 0; }
21      .box3 { border-radius: 200px 0; }
22      .box4 { border-radius: 0 200px; }
23      .box5 { border-radius: 50%; }
24      .obj { float: left; }
25      .box5 {
26        background-color: gold;
27        position: absolute;
28        top: 50%; margin-top: -100px;
29        left: 50%; margin-left: -100px;
30      }
31      .frame {
32        position: relative;
33        top: 50%; margin-top: -200px;
34        margin-left: auto;
35        margin-right: auto;
36      }
37    </style>
38    <style>
39      @keyframes aniyeyo {
40        0% { transform: rotate(0deg); }
41        100% { transform: rotate(360deg); }
42      }
43      .frame { animation: aniyeyo 2s infinite linear;}
44    </style>
45    <style>
46      .frame { background-color: transparent; }
47    </style>
48  </head>
49  <body>
50    <div class="frame">
51      <div class="obj box1"></div>
52      <div class="obj box2"></div>
53      <div class="obj box3"></div>
54      <div class="obj box4"></div>
55      <div class="obj box5"></div>
56    </div>
57  </body>
58  </html>
```