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<html>
<head>
  <style>
    body{
      margin: 0px;
    }

    .gamearea{
      width:1000px;
      height: 700px;
      border: solid;
      background-image: url("grass.jpeg");
    }

    .ant1{
      width:45px;
      height: 40px;
      /*background-color:black;
      border:solid;*/
      position: relative;
      top:350px;
      left:300px
    }

    .ant2{
      width:45px;
      height: 40px;
      /*background-color:red;
      border:solid;*/
      position: relative;
      top:310px;
      left:600px
    }

    .topleg{
      /*animation-duration: 2200ms;
      animation-name: topleg;*/
      animation:topleg 400ms 1
    }
    @keyframes topleg {
      0% {transform: rotate(-30deg);}
      100% {transform: rotate(-10deg);}
    }

    .bottomleg{
      /*animation-duration: 2200ms;
      animation-name: bottomleg;*/
      animation:bottomleg 400ms 1
    }
    @keyframes bottomleg {
      0% {transform: rotate(30deg);}
      100% {transform: rotate(10deg);}
    }
  </style>
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<script src="jquery.min.js"></script>
<script src="jquery-ui/jquery-ui.js"></script>
<script href="jquery-ui/jquery-ui.css" rel="stylesheet"></script>
<script src="jquerycollision/jquery-collision.js"></script>

<script src="https://code.jquery.com/jquery-3.6.0.js"></script>
<script src="https://code.jquery.com/ui/1.13.1/jquery-ui.js"></script>
<script type="text/javascript"
src="http://ajax.googleapis.com/ajax/libs/jqueryui/1.11.1/jquery-
ui.min.js"></script>

</head>

<body>

    <div class="gamearea">
        <label for="file" style="font-size: 25px;color: white;">Ant 1:</label>
        <progress id="file" value="32" max="100" style="height: 25px"> 32%
</progress>

        <label for="file" style="font-size: 25px;color: white;">Ant 2:</label>
        <progress id="file" value="32" max="100" style="height: 25px"> 32%
</progress>

        <div id="div1" class="ant1 div1">
            <div style="width:30px; height:25px; background-color:black"></div>
            <div style="width:15px; height:12px; background-color:black;position:
relative;left:30px;top:-18px"></div>

            <div class="topleg1" style="width:4px; height:15px; background-
color:black; position: relative;left:21px;top:-51px; transform: rotate(-
10deg);"></div>
            <div class="topleg1" style="width:4px; height:15px; background-
color:black; position: relative;left:5px;top:-66px; transform: rotate(-
10deg);"></div>
            <div class="bottomleg1" style="width:4px; height:15px; background-
color:black; position: relative;left:21px;top:-43px;transform:
rotate(10deg);"></div>
            <div class="bottomleg1" style="width:4px; height:15px; background-
color:black; position: relative;left:5px;top:-58px;transform:
rotate(10deg);"></div>
        </div>
        <div class="ant2 div2" id="div2">
            <div style="width:30px; height:25px; background-color:red"></div>
            <div style="width:15px; height:12px; background-color:red;position:
relative;left:-15px;top:-18px"></div>

            <div class="bottomleg2" style="width:4px; height:15px; background-
color:red; position: relative;left:21px;top:-51px; transform:
rotate(10deg);"></div>

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        <div class="bottomleg2" style="width:4px; height:15px; background-
color:red; position: relative;left:5px;top:-66px; transform: rotate(10deg);"></div>
        <div class="topleg2" style="width:4px; height:15px; background-
color:red; position: relative;left:21px;top:-43px; transform: rotate(-
10deg);"></div>
        <div class="topleg2" style="width:4px; height:15px; background-
color:red; position: relative;left:5px;top:-58px; transform: rotate(-
10deg);"></div>
    </div>
</div>

<script>
$(document).keydown(function(e){
switch (e.which){
case 37:    // key left, right, up, and down
    $(".ant2").finish().animate({
        left: "-=10"
    });
    setInterval(function () {
        $(".topleg2").addClass("topleg");
        $(".bottomleg2").addClass("bottomleg")
    }, 100);
    $(".topleg2").removeClass("topleg");
    $(".bottomleg2").removeClass("bottomleg")
    break;
case 38:    // key up
    $(".ant2").finish().animate({
        top: "-=10"
    });
    setInterval(function () {
        $(".topleg2").addClass("topleg");
        $(".bottomleg2").addClass("bottomleg")
    }, 100);
    $(".topleg2").removeClass("topleg");
    $(".bottomleg2").removeClass("bottomleg")
    break;
case 39:    // key right
    $(".ant2").finish().animate({
        left: "+=10"
    });
    setInterval(function () {
        $(".topleg2").addClass("topleg");
        $(".bottomleg2").addClass("bottomleg")
    }, 100);
    $(".topleg2").removeClass("topleg");
    $(".bottomleg2").removeClass("bottomleg")
    break;
case 40:    // key down
    $(".ant2").finish().animate({
        top: "+=10"
    });

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        setInterval(function () {
            $(".topleg2").addClass("topleg");
            $(".bottomleg2").addClass("bottomleg")
        }, 100);
        $(".topleg2").removeClass("topleg");
        $(".bottomleg2").removeClass("bottomleg")
        break;
        case 37:    // key left, right, up, and down
        $(".ant2").finish().animate({
            left: "-=10"
        });
        break;

        case 65:    // key left, right, up, and down
        $(".ant1").finish().animate({
            left: "-=10"
        });

        setInterval(function () {
            $(".topleg1").addClass("topleg");
            $(".bottomleg1").addClass("bottomleg")
        }, 100);
        $(".topleg1").removeClass("topleg");
        $(".bottomleg1").removeClass("bottomleg")

        break;
        case 87:    // key up
        $(".ant1").finish().animate({
            top: "-=10"
        });
        setInterval(function () {
            $(".topleg1").addClass("topleg");
            $(".bottomleg1").addClass("bottomleg")
        }, 100);
        $(".topleg1").removeClass("topleg");
        $(".bottomleg1").removeClass("bottomleg")

        break;
        case 68:    // key right
        $(".ant1").finish().animate({
            left: "+=10"
        });
        setInterval(function () {
            $(".topleg1").addClass("topleg");
            $(".bottomleg1").addClass("bottomleg")
        }, 100);
        $(".topleg1").removeClass("topleg");
        $(".bottomleg1").removeClass("bottomleg")

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        break;
    case 83: // key down
        $(".ant1").finish().animate({
            top: "+=10"
        });
        setInterval(function () {
            $(".topleg1").addClass("topleg");
            $(".bottomleg1").addClass("bottomleg")
        }, 100);
        $(".topleg1").removeClass("topleg");
        $(".bottomleg1").removeClass("bottomleg")
        break;
    }
});

$( "#div1" ).draggable({ axis: "x,y"});
$( "#div2" ).draggable({ axis: "x,y"});

$("#div1").draggable( { obstacle: ".div2" } );

$("#div1").draggable( { obstacle: ".div2", preventCollision: true } );

/*function collision($div1, $div2) {
    var x1 = $div1.offset().left;
    var y1 = $div1.offset().top;
    var h1 = $div1.outerHeight(true);
    var w1 = $div1.outerWidth(true);
    var b1 = y1 + h1;
    var r1 = x1 + w1;
    var x2 = $div2.offset().left;
    var y2 = $div2.offset().top;
    var h2 = $div2.outerHeight(true);
    var w2 = $div2.outerWidth(true);
    var b2 = y2 + h2;
    var r2 = x2 + w2;

    if (b1 < y2 || y1 > b2 || r1 < x2 || x1 > r2) return false;
    return true;
};

collision(); */
function collision($div1, $div2) {
    var x1 = $div1.offset().left;
    var y1 = $div1.offset().top;
    var x2 = $div2.offset().left;
    var y2 = $div2.offset().top;
    if ((y1 + $div1.outerHeight(true)) < y2 ||
        y1 > (y2 + $div2.outerHeight(true)) ||
        (x1 + $div1.outerWidth(true)) < x2 ||
        x1 > (x2 + $div2.outerWidth(true)))

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        alert('false');
        alert ('true');
    }
collision();

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