Between the Birds

You will need these backgrounds:

(All backgrounds must be 400 x 400)

You will need these characters:

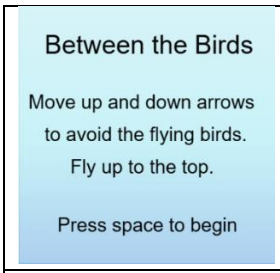
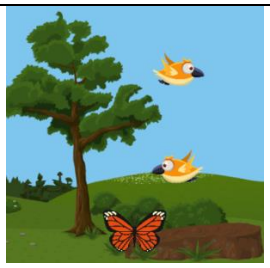
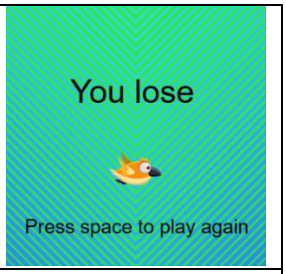
These are the animations and variables that you will need:

```
var bg = createSprite(200, 200);
bg.setAnimation("Opening");

//start everything off screen and not moving
var bird = createSprite(-100, 100);
bird.setAnimation("bird_right");
bird.scale = 0.3;
var bird2 = createSprite(-300, 100);
bird2.setAnimation("bird_left");
bird2.scale = 0.3;
var butterfly = createSprite(-200, 300);
butterfly.setAnimation("butterfly");
butterfly.scale = 0.25;

//to track the current position
var mode = "1 - opening";
```

The mode will switch between these states:

	(starts the birds' velocity, moves things onto screen)			
1 – opening	2 - start	3 - play	4 - win	5 - lose

Mode = "1 – opening"

```
function opening(){
  //set up the opening screen
  textSize(40);
  fill("black");
  text("Between the Birds", 40, 75);
  textSize(30);
  text("Move up and down arrows", 15, 160);
  text("to avoid the flying birds.", 40, 210);
  text("Fly up to the top.", 80, 260);
  text("Press space to begin", 60, 350);
}
```

Mode = "2 – start"

(starts the birds' velocity, moves things onto screen)

```
function start(){
  //set the characters moving
  bg.setAnimation("meadow");
  bird.x=200;
  bird.y=100;
  bird.setAnimation("bird_right");
  bird.velocityX = 4;
  bird2.x=350;
  bird2.y=250;
  bird2.setAnimation("bird_left");
  bird2.velocityX = -4;
  butterfly.x=200;
  butterfly.y=350;
  mode="3 - play";
}
```

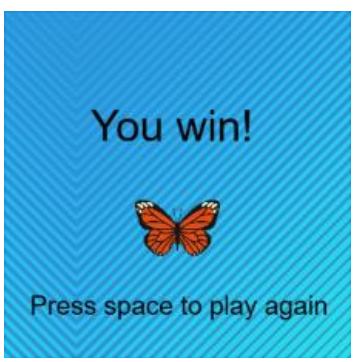
Mode = “3 – play”

```
function play(){
  //move bird #1 (enemy)
  if( bird.x<20 ){
    bird.velocityX=4;
    bird.setAnimation("bird_right");
  } else if( bird.x>380 ){
    bird.velocityX=-4;
    bird.setAnimation("bird_left");
  }
  //move bird #2 (enemy)
  if( bird2.x<20 ){
    bird2.velocityX=4;
    bird2.setAnimation("bird_right");
  } else if( bird2.x>380 ){
    bird2.velocityX=-4;
    bird2.setAnimation("bird_left");
  }
  //move butterfly (you)
  if( keyDown("up") && butterfly.y>20 ){
    butterfly.y-=5;
  }else if( keyDown("down") && butterfly.y<380 ){
    butterfly.y+=5;
  }
  //win or loss
  if( butterfly.collide(bird) ){
    lose();
  }else if( butterfly.collide(bird2) ){
    lose();
  }else if( butterfly.y<=25 ){
    win();
  }
}
```

CUT AND PASTE:

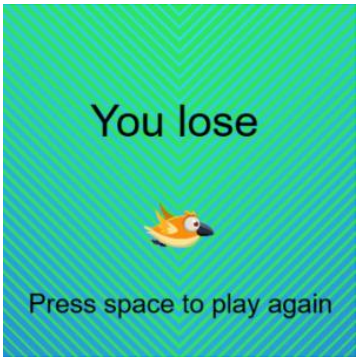
```
function play(){
 //move bird #1 (enemy)
 if(bird.x<20){
  bird.velocityX=4;
  bird.setAnimation("bird_right");
 } else if(bird.x>380){
  bird.velocityX=-4;
  bird.setAnimation("bird_left");
 }
 //move bird #2 (enemy)
 if(bird2.x<20){
  bird2.velocityX=4;
  bird2.setAnimation("bird_right");
 } else if(bird2.x>380){
  bird2.velocityX=-4;
  bird2.setAnimation("bird_left");
 }
 //move butterfly (you)
 if(keyDown("up")&&butterfly.y>20){
  butterfly.y-=5;
 }else
if(keyDown("down")&&butterfly.y<380){
  butterfly.y+=5;
 }
 //win or loss
 if(butterfly.collide(bird)){
  lose();
 }else if(butterfly.collide(bird2)){
  lose();
 }else if(butterfly.y<=25){
  win();
 }
}
```

Mode = “4 – win”




```
function win(){
  //Display win screen
  bg.setAnimation("Lose");
  freeze();
  butterfly.x=200;
  butterfly.y=250;
  mode="4 - win";
  textSize(50);
  fill("black");
  text("You win!", 100, 150);
  textSize(30);
  text("Press space to play again", 30, 350);
}
```

Mode = “5 – lose”




```
function lose(){
  //Display lose screen
  bg.setAnimation("Win");
  freeze();
  bird.x=200;
  bird.y=250;
  mode="5 - lose";
  textSize(50);
  fill("black");
  text("You lose", 100, 150);
  textSize(30);
  text("Press space to play again", 30, 350);
}
```

This will freeze the pieces and move them off screen so the win and lose functions can run:

```
function freeze(){
  //freeze the pieces
  //move them all off screen
  bird.x=-200;
  bird.y=-200;
  bird.velocityX = 0;
  bird.velocityY = 0;
  bird2.x=-200;
  bird2.y=-200;
  bird2.velocityX = 0;
  bird2.velocityY = 0;
  butterfly.x=-300;
  butterfly.y=-300;
}
```

This is the draw loop that pulls all the pieces together:

```
function draw() {
  drawSprites();
  //playing the correct mode
  if (mode=="1 - opening") {
    opening();
  } else if (mode=="2 - start") {
    start();
  } else if (mode=="3 - play") {
    play();
  } else if (mode=="4 - win") {
    win();
  } else if (mode=="5 - lose") {
    lose();
  }

  //space to move on
  if (keyWentDown("space")) {
    if (mode=="1 - opening") {
      mode = "2 - start";
    } else if (mode=="4 - win") {
      mode = "2 - start";
    } else if (mode=="5 - lose") {
      mode = "2 - start";
    }
  }
}
```

CUT AND PASTE:

```
function draw() {
 drawSprites();
 //playing the correct mode
 if (mode=="1 - opening") {
  opening();
 } else if (mode=="2 - start") {
  start();
 } else if (mode=="3 - play") {
  play();
 } else if (mode=="4 - win") {
  win();
 } else if (mode=="5 - lose") {
  lose();
 }

 //space to move on
 if (keyWentDown("space")) {
  if (mode=="1 - opening") {
   mode = "2 - start";
  } else if (mode=="4 - win") {
   mode = "2 - start";
  } else if (mode=="5 - lose") {
   mode = "2 - start";
  }
 }
}
```