```
1.  package{
2.      import flash.display.MovieClip;
3.      import flash.events.KeyboardEvent;
4.      import flash.ui.Keyboard;
5.      import flash.events.Event; //used for ENTER_FRAME event
6.
7.      public class Main extends MovieClip{
8.
9.          //constants
10.         const gravity:Number = 1.5;             //gravity of the game
11.         const dist_btw_obstacles:Number = 300; //distance between two obstacles
12.         const ob_speed:Number = 8;              //speed of the obstacle
13.         const jump_force:Number = 15;           //force with which it jumps
14.
15.         //variables
16.         var player:Player = new Player();
17.         var lastob:Obstacle = new Obstacle(); //varible to store the last obstacle in the obstacle array
18.         var obstacles:Array = new Array();     //an array to store all the obstacles
19.         var yspeed:Number = 0;                 //A variable representing the vertical speed of the bird
20.         var score:Number = 0;                  //A variable representing the score
21.
22.         public function Main(){
23.             init();
24.         }
25.
26.         function init():void {
27.             //initialize all the variables
28.             player = new Player();
29.             lastob = new Obstacle();
30.             obstacles = new Array();
31.             yspeed = 0;
32.             score = 0;
33.
34.             //add player to center of the stage the stage
35.             player.x = stage.stageWidth/2;
36.             player.y = stage.stageHeight/2;
37.             addChild(player);
38.
```

```actionscript
39.          //create 3 obstacles ()
40.          createObstacle();
41.          createObstacle();
42.          createObstacle();
43.
44.          //Add EnterFrame EventListeners (which is called every frame) and KeyBoard EventListeners
45.          addEventListener(Event.ENTER_FRAME,onEnterFrameHandler);
46.          stage.addEventListener(KeyboardEvent.KEY_UP, key_up);
47.      }
48.
49.      private function key_up(event:KeyboardEvent){
50.          if(event.keyCode == Keyboard.SPACE){
51.              //If space is pressed then make the bird
52.              yspeed = -jump_force;
53.          }
54.      }
55.
56.      function restart(){
57.          if(contains(player))
58.              removeChild(player);
59.              for(var i:int = 0; i < obstacles.length; ++i){
60.                  if(contains(obstacles[i]) && obstacles[i] != null)
61.                  removeChild(obstacles[i]);
62.                  obstacles[i] = null;
63.              }
64.              obstacles.slice(0);
65.              init();
66.      }
67.
68.      function onEnterFrameHandler(event:Event){
69.          //update player
70.          yspeed += gravity;
71.          player.y += yspeed;
72.
73.          //restart if the player touches the ground
74.          if(player.y + player.height/2 > stage.stageHeight){
75.              restart();
76.          }
77.
78.          //Don't allow the bird to go above the screen
```

```actionscript
79.              if(player.y - player.height/2 < 0){
80.                  player.y = player.height/2;
81.              }
82.
83.              //update obstacles
84.              for(var i:int = 0;i<obstacles.length;++i){
85.                  updateObstacle(i);
86.              }
87.
88.              //display the score
89.              scoretxt.text = String(score);
90.          }
91.
92.          //This functions update the obstacle
93.          function updateObstacle(i:int){
94.              var ob:Obstacle = obstacles[i];
95.
96.              if(ob == null)
97.              return;
98.              ob.x -= ob_speed;
99.
100.                  if(ob.x < -ob.width){
101.                      //if an obstacle reaches left of the stage then change its position to the back of
     the last obstacle
102.                       changeObstacle(ob);
103.                  }
104.
105.                  //If the bird hits an obstacle then restart the game
106.                  if(ob.hitTestPoint(player.x + player.width/2,player.y + player.height/2,true)
107.                      || ob.hitTestPoint(player.x + player.width/2,player.y - player.height/2,true)
108.                      || ob.hitTestPoint(player.x - player.width/2,player.y + player.height/2,true)
109.                      || ob.hitTestPoint(player.x - player.width/2,player.y - player.height/2,true)){
110.                       restart();
111.                  }
112.
113.                  //If the bird got through the obstacle without hitting it then increase the score
114.                  if((player.x - player.width/2 > ob.x + ob.width/2) && !ob.covered){
115.                      ++score;
116.                       ob.covered = true;
117.                  }
```

```
118.                }
119.
120.                //This function changes the position of the obstacle such that it will be the last obstacle
     and it also randomizes its y position
121.                function changeObstacle(ob:Obstacle){
122.                        ob.x = lastob.x + dist_btw_obstacles;
123.                        ob.y = 100+Math.random()*(stage.stageHeight-200);
124.                        lastob = ob;
125.                        ob.covered = false;
126.                }
127.
128.                //this function creates an obstacle
129.                function createObstacle(){
130.                        var ob:Obstacle = new Obstacle();
131.                        if(lastob.x == 0)
132.                        ob.x = 800;
133.                        else
134.                        ob.x = lastob.x + dist_btw_obstacles;
135.                        ob.y = 100+Math.random()*(stage.stageHeight-200);
136.                        addChild(ob);
137.                        obstacles.push(ob);
138.                        lastob = ob;
139.                }
140.
141.
142.            }
143.        }
```

RAW Paste Data

```
package{

    import flash.display.MovieClip;

    import flash.events.KeyboardEvent;

    import flash.ui.Keyboard;

    import flash.events.Event; //used for ENTER_FRAME event



    public class Main extends MovieClip{
```

```
//constants
```