

First of all we declare the variable for the x,y location of the ball,

```
“ int x=0;
```

```
Int y=0; “
```

Then we declare the speed at which the ball will move.

Then we declare a variable for the stage on which the ball is.

For example:

Stage_0=left to right

Stage_1=right to bottom

Stage_2=bottom right to bottom left

Stage_4= left bottom to top left.

```
“int Stage=0;”
```

This is just a variable to keep a track of the ball's stage, where has it reached, depending on this stage the ball will move left, right, down, or up.

Then in void setup we choose the window size with which we want to work and also pass the background function.

Then, using the void draw function we display the ball with the help of assigned variables. For example:

```
“ellipse(x,y,50,50);”
```

Then using if else and else if statements we will make the ball move.

For example: At first, we want to move the ball to the right. We say

```
“If (state==0);
```

```
{
```

```
    x=x+speed;
```

```
    If (x>width-10) {
```

```
        x=width-10;
```

```
        State=1;  
    }  
    }”
```

The first line of code implies that if state=0 move to the right.

Then make the ball move across the x axis we + the speed to x

And when we want to make the ball move downwards we add the speed to y .

We will use the same logic to move the ball across the boundary of the window.

All we have to do for the ball to move to the left from the right is to subtract the speed from x and when the ball has to go up from the left bottom corner then also we subtract the the speed from y