int ballX=320; // declare variable to hold x position of ball

float ballY=180; // declare variable to hold y position of ball

float diameter=20; // declare and initiate

float radius =10; //declare variable to store radius

int leftScore =0; // declare variable for left score

int rightScore =0; //declare variable for right score

int leftPaddleX =0; // variable for left paddle x position

int leftPaddleY =0; // variable for left paddle y position

int rightPaddleX =620; //variable for right paddle x position

int rightPaddleY=280; // variable for right paddle y position

int paddleWidth =20; // variable for paddle width

int paddleHeight=80; // variable for paddle height

int txtSize=80; // variable for text size

int leftScoreX=180; //variable for left score x position

int leftScoreY=180; //variable for left score y position

int rightScoreX=460; //variable for right score x position

int rightScoreY=180; // variable for right score y position

int speedX=2; // variable for ball speed

int speedY=1; // variable for ball speed

boolean gameOn=false; // variable for when game is off.

void setup() {

size(640,360);

background(0); // sets background to black

}

void draw() {

background(0);

fill(0,255,0); // Green interior

stroke(0,0,255); // blue outline

rect(rightPaddleX,rightPaddleY,paddleWidth, paddleHeight); // draws second rectangle

rect(leftPaddleX,leftPaddleY,paddleWidth, paddleHeight); //draws rectangle

fill(255,255,255); // sets ball colour to white

ellipse(ballX,ballY,diameter,diameter); //create ball with variables

fill(255,255,255); // sets text interior to white

stroke(255,255,255); // sets text colour to white

textSize(txtSize); // sets text size

text(leftScore,leftScoreX,leftScoreY); // sets text to 0

text(rightScore,rightScoreX,rightScoreY); // sets text to 5

//Check if ball hits top and bottom walls

if((ballY-radius<=0)||(ballY+radius)>=height){

speedY=speedY\*-1; }

if(mousePressed){ // game activates if the user touches the screen

gameOn=true; } // game is turned on

if(gameOn){

// move ball up and right

ballX= ballX-=speedX; // increament x position

ballY= ballY+=speedY; // decrement y position

if ((ballX-radius<=0)){ // ball hits left side

leftScore=leftScore +1; // increase left player score

gameOn=false; // turn off game

}

if ((ballX+radius)>=width){ //ball hits right side

rightScore=rightScore +1; // increase right player score

gameOn=false; // turn off game

}

}

else{

//set ball to centre

ballX=width/2;

ballY=height/2;

}

}