Bouncing off

var x,y;

var vx,vy;

var r;

function bounce(){

if (x>width-r)

vx=-abs(vx)

if (x<r)

vx=abs(vx);

if (y>height-r)

vy=-abs(vy);

if (y<r)

vy=abs(vy);

}

function setup(){

x=width\*random();

y=height\*random();

vx=random()-0.5;

vy=random()-0.5;

r=10;

loop();

}

function draw(){

clear();

circle(x,y,r);

x=x+vx;

y=y+vy;

bounce();

}

Without Clear

var x,y;

var vx,vy;

var r;

function bounce(){

if (x>width-r)

vx=-abs(vx)

if (x<r)

vx=abs(vx);

if (y>height-r)

vy=-abs(vy);

if (y<r)

vy=abs(vy);

}

function setup(){

x=width\*random();

y=height\*random();

vx=2\*(random()-0.5);

vy=2\*(random()-0.5);

//=0;

//=0.01;

r=3;

loop();

}

function draw(){

//clear();

circle(x,y,r);

x=x+vx;

y=y+vy;

bounce();

}

With gravity Wrong

var x,y;

var vx,vy;

var r;

var ax,ay;

function bounce(){

var e=0.95;

if (x>width-r)

vx=-abs(vx)

if (x<r)

vx=abs(vx);

if (y>height-r)

vy=-abs(vy);

if (y<r)

vy=abs(vy);

}

function setup(){

x=width\*random();

y=height\*random();

vx=2\*(random()-0.5);

vy=2\*(random()-0.5);

ax=0;

ay=0.01;

r=3;

loop();

}

function draw(){

//clear();

circle(x,y,r);

x=x+vx;

y=y+vy;

vx=vx+ax

vy=vy+ay;

bounce();

}

Working gravity

var x,y;

var vx,vy;

var r;

var ax,ay;

function bounce(){

var e=0.95;

if (x>width-r)

vx=-e\*abs(vx);

if (x<r)

vx=e\*abs(vx);

if (y>height-r)

vy=-e\*abs(vy);

if (y<r)

vy=e\*abs(vy);

}

function setup(){

x=width\*random();

y=height\*random();

vx=2\*(random()-0.5);

vy=2\*(random()-0.5);

ax=0;

ay=0.01;

r=3;

loop();

}

function draw(){

//clear();

circle(x,y,r);

x=x+vx;

y=y+vy;

vx=vx+ax

vy=vy+ay;

bounce();

}