```
//class 22 - 23: Physics Engine
//Developer: Zaara

//Declare variables for game objects and behaviour indicators(FLAGS)


//constants
const Engine = Matter.Engine;   //Universe
const World  = Matter.World;    //Planet Earth
const Bodies = Matter.Bodies;   //Non-living and Living Bodies

//simulation of Engine and World to be used by developer
var userEngine, userWorld;

//creation of Bodies
var ground, ball;
var cube1, cube2;




//Create Media library and load to use it during the course of the software
//executed only once at the start of the program
function preload() {

}

//define the intial environment of the software(before it is used)
//by defining the declared variables with default values
//executed only once at the start of the program
function setup() {
  createCanvas(850,600);

  //creation of simulation: Engine and World
  userEngine = Engine.create();
  userWorld  = userEngine.world;

  //creation of ground using matter.js
  var ground_options = {
     isStatic: true
  }
  ground = Bodies.rectangle(400, 550, 750, 30, ground_options);
  World.add(userWorld, ground);
  console.log(ground);
```

```
  //creation of ball using matter.js
  var ball_options = {
    restitution: 1.0
  }
  ball = Bodies.circle(300, 300, 30, ball_options);
  World.add(userWorld, ball);
  console.log(ball);


}

//All changes, conditions, manipulations, actions to be executed and checked
continously or applied throughout the program are written inside function
draw.
//function draw is executed for every frame created since the start of the
program.
function draw() {
  background(0);

  //activation of simulated Engine
  Engine.update(userEngine);


  //display of ground using matter.js
  rectMode(CENTER);
  fill("brown");
  rect(ground.position.x, ground.position.y, 750, 30);


  //display of ball using matter.js
  ellipseMode(CENTER);
  fill("lightgreen");
  ellipse(ball.position.x, ball.position.y, 60, 60);



  //simple rectangle shape
  rectMode(CENTER);
  fill("lightblue");
  rect(670, 200, 50, 50);


}
```