

```
function getRandomInt(max) {
  return Math.floor(Math.random() * max);
}
```

```
function resolveAfter2Seconds(x) {
  return new Promise(resolve => {
    setTimeout(() => {
      resolve(x);
    },x);
  });
}
```

```
async function f1() {
  if(document.getElementById("actionButton").innerHTML=="REALIZANDO SIMULACIÓN"){
    alert("LA SIMULACIÓN YA SE ESTA EJECUTANDO");
    return;
  }

  if(document.getElementById('iteraciones').value==0){
    alert("SELECCIONE UN NUMERO DE ITERACIONES PARA PODER COMENZAR LA
SIMULACIÓN");
    return;
  }
}
```

```
document.getElementById("actionButton").innerHTML="REALIZANDO SIMULACIÓN";
var p2=0,p3=0,p4=0,p5=0,p6=0,p7=0,p8=0,p9=0,p10=0,p11=0,p12=0;
var pr2=0,pr3=0,pr4=0,pr5=0,pr6=0,pr7=0,pr8=0,pr9=0,pr10=0,pr11=0,pr12=0;
var totIter=0;
for (var i = 0; i < document.getElementById('iteraciones').value; i++) {
  totIter++;
  var speed =document.getElementById('velocidad').value;
  console.log(speed);
  if(speed==""){
    await resolveAfter2Seconds(100);
  }else if(speed==1){
    await resolveAfter2Seconds(400);
  }else if(speed==2){
    await resolveAfter2Seconds(10);
  }
}
```

```
var dado1=document.getElementById('dado1');
var dado2=document.getElementById('dado2');
document.getElementById("iteracion").innerHTML=`iteración: ${i+1}`;
var num=getRandomInt(6)+1;
```

```

var num2=getRandomInt(6)+1;
if (speed!=3) {
    if(num===1){
        dado1.src="dado1.png";
    }else if(num==2){
        dado1.src="dado2.png";
    }else if(num==3){
        dado1.src="dado3.png";
    }else if(num==4){
        dado1.src="dado4.png";
    }else if(num==5){
        dado1.src="dado5.png";
    }else{
        dado1.src="dado6.png";
    }

    if(num2===1){
        dado2.src="dado1.png";
    }else if(num2==2){
        dado2.src="dado2.png";
    }else if(num2==3){
        dado2.src="dado3.png";
    }else if(num2==4){
        dado2.src="dado4.png";
    }else if(num2==5){
        dado2.src="dado5.png";
    }else{
        dado2.src="dado6.png";
    }
}

```

```

if(num+num2==2){
    p2++;
}else if(num+num2==3){
    p3++;
}else if(num+num2==4){
    p4++;
}else if(num+num2==5){
    p5++;
}else if(num+num2==6){
    p6++;
}else if(num+num2==7){
    p7++;
}

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}else if(num+num2==8){
    p8++;
}else if(num+num2==9){
    p9++;
}else if(num+num2==10){
    p10++;
}else if(num+num2==11){
    p11++;
}else{
    p12++
}

pr2=Math.floor(p2/(i+1)*100);
pr3=Math.ceil(p3/(i+1)*100);
pr4=Math.floor(p4/(i+1)*100);
pr5=Math.ceil(p5/(i+1)*100);
pr6=Math.floor(p6/(i+1)*100);
pr7=Math.ceil(p7/(i+1)*100);
pr8=Math.floor(p8/(i+1)*100);
pr9=Math.ceil(p9/(i+1)*100);
pr10=Math.floor(p10/(i+1)*100);
pr11=Math.ceil(p11/(i+1)*100);
pr12=100-(pr2+pr3+pr4+pr5+pr6+pr7+pr8+pr9+pr10+pr11);
if(pr12<0)pr12=0;

```

```

if (speed!=3) {
    document.getElementById("result1").innerHTML=
    `<div class='d-flex flex-row'id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 2:</div>
        <div id='provab1'>prov: ${pr2}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p2} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 3:</div>
        <div id='provab1'>prov: ${pr3}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p3} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 4:</div>
        <div id='provab1'>prov: ${pr4}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p4} </div>
    </div>

```

```

</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 5:</div>
    <div id='provab1'>prov: ${pr5}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p5} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 6:</div>
    <div id='provab1'>prov: ${pr6}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p6} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 7:</div>
    <div id='provab1'>prov: ${pr7}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p7} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 8:</div>
    <div id='provab1'>prov: ${pr8}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p8} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 9:</div>
    <div id='provab1'>prov: ${pr9}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p9} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 10:</div>
    <div id='provab1'>prov: ${pr10}%</div>
    <div class='ms-5' id='rep1'>Rep: ${p10} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 11:</div>
    <div id='provab1'>prov: ${pr11}%</div>
    <div class='ms-5' id='rep1'>Rep: ${p11} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 12:</div>
    <div id='provab1'>prov: ${pr12}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p12} </div>
</div>`;
drwarChart1(p2,p3,p4,p5,p6,p7,p8,p9,p10,p11,p12);
}
}

```

```

pr2=Math.floor(p2/(totIter+1)*100);
    pr3=Math.ceil(p3/(totIter+1)*100);
    pr4=Math.floor(p4/(totIter+1)*100);
    pr5=Math.ceil(p5/(totIter+1)*100);
    pr6=Math.floor(p6/(totIter+1)*100);
    pr7=Math.ceil(p7/(totIter+1)*100);
    pr8=Math.floor(p8/(totIter+1)*100);
    pr9=Math.ceil(p9/(totIter+1)*100);
    pr10=Math.floor(p10/(totIter+1)*100);
    pr11=Math.ceil(p11/(totIter+1)*100);
    pr12=100-(pr2+pr3+pr4+pr5+pr6+pr7+pr8+pr9+pr10+pr11);
    if(pr12<0)pr12=0;

```

```

document.getElementById("iteracion").innerHTML=`;
document.getElementById("result1").innerHTML=
`<h6 class="mb-2">ITERACIONES REALIZADAS: ${totIter}</h6>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 2:</div>
    <div id='provab1'>prov: ${pr2}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p2} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 3:</div>
    <div id='provab1'>prov: ${pr3}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p3} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 4:</div>
    <div id='provab1'>prov: ${pr4}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p4} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 5:</div>
    <div id='provab1'>prov: ${pr5}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p5} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 6:</div>
    <div id='provab1'>prov: ${pr6}% </div>
    <div class='ms-5' id='rep1'>Rep: ${p6} </div>
</div>
<div class='d-flex flex-row' id='estadisticas1'>
    <div class='ms-3 me-4' id='valeatoria'>x = 7:</div>

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        <div id='provab1'>prov: ${pr7}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p7} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 8:</div>
        <div id='provab1'>prov: ${pr8}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p8} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 9:</div>
        <div id='provab1'>prov: ${pr9}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p9} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 10:</div>
        <div id='provab1'>prov: ${pr10}%</div>
        <div class='ms-5' id='rep1'>Rep: ${p10} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 11:</div>
        <div id='provab1'>prov: ${pr11}%</div>
        <div class='ms-5' id='rep1'>Rep: ${p11} </div>
    </div>
    <div class='d-flex flex-row' id='estadisticas1'>
        <div class='ms-3 me-4' id='valeatoria'>x = 12:</div>
        <div id='provab1'>prov: ${pr12}% </div>
        <div class='ms-5' id='rep1'>Rep: ${p12} </div>
    </div>`;
    drwarChart1(p2,p3,p4,p5,p6,p7,p8,p9,p10,p11,p12);

    document.getElementById("actionButton").innerHTML="COMENZAR SIMULACIÓN";
    // 10
}

function drwarChart1(r2,r3,r4,r5,r6,r7,r8,r9,r10,r11,r12){
    var canvas=document.getElementById('myChart').getContext('2d');
    const labels = [
        'X=2',
        'X=3',
        'X=4',
        'X=5',
        'X=6',
        'X=7',

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```
        'X=8',  
        'X=9',  
        'X=10',  
        'X=11',  
        'X=12'  
    ];  
};
```

```
const data = {  
  labels: labels,  
  datasets: [{  
    type: 'bar',  
    label: 'Lanzamientos acertados',  
    backgroundColor: ['rgb(54, 162, 235)', 'rgb(255, 99, 132)'],  
    borderColor: ['rgb(255, 99, 132)', 'rgb(54, 162, 235)'],  
    data: [0, r2, r3, r4, r5, r6, r7, r8, r9, r10, r11, r12],  
  }]  
};
```

```
const config = {  
  type: 'scatter',  
  data: data,  
  options: {  
    scales: {  
      y: {  
        beginAtZero: true  
      }  
    }  
  }  
};
```

```
try{  
  var chartExist = Chart.getChart("myChart"); // <canvas> id  
  if (chartExist !== undefined){  
    chartExist.destroy();  
  }  
}catch(e){  
  console.log(e);  
}
```

```
const myChart = new Chart(  
  document.getElementById('myChart'),  
  config  
);  
}
```