

```
-----  
| Particle |  
-----  
| - x: int |  
| - y: int |  
-----  
| + Particle(x: int, y: int) |  
| + moveRandomly(): void |  
| + getX(): int |  
| + getY(): int |  
-----
```

|
|
v

```
-----  
| Box |  
-----  
| - instance: Box |  
| - width: int |  
| - height: int |  
| - particles: List<Particle> |  
-----  
| + getInstance(): Box |  
| + simulate(steps: int): void |  
| - moveParticles(): void |  
| - checkCollisions(): void |  
| - visualizeBox(): void |  
| + getWidth(): int |  
| + getHeight(): int |  
-----
```

|
|
v

```
-----  
| Main |  
-----  
| |  
| |  
| + main(args: String[]): void |  
-----
```