

```
class Ball(GameObject):

    def __init__(self, canvas, x, y):
        self.radius = 10
        self.direction = [1, -1]
        # increase the below value to increase the speed of ball
        self.speed = 5
        item = canvas.create_oval(x-self.radius, y-self.radius,
                               x+self.radius, y+self.radius,
                               fill='white')
        super(Ball, self).__init__(canvas, item)
```

```
def update(self):
    coords = self.get_position()
    width = self.canvas.winfo_width()
    if coords[0] <= 0 or coords[2] >= width:
        self.direction[0] *= -1
    if coords[1] <= 0:
        self.direction[1] *= -1
    x = self.direction[0] * self.speed
    y = self.direction[1] * self.speed
    self.move(x, y)
```

```
def collide(self, game_objects):
    coords = self.get_position()
    x = (coords[0] + coords[2]) * 0.5
    if len(game_objects) > 1:
        self.direction[1] *= -1
    elif len(game_objects) == 1:
        game_object = game_objects[0]
```

```
coords = game_object.get_position()  
if x > coords[2]:  
    self.direction[0] = 1  
elif x < coords[0]:  
    self.direction[0] = -1  
else:  
    self.direction[1] *= -1
```

```
for game_object in game_objects:  
    if isinstance(game_object, Brick):  
        game_object.hit()
```