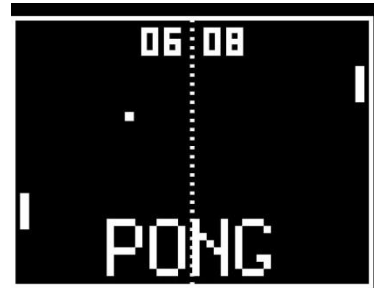




PONG – Correct the “variable speed” bug



When the ball is travelling to the left it goes twice as fast as when it is going to the right. Which is not only a bug but also not fair to that player.

The first step is to understand why this is happening. Find the following text, in the “BatCollisionTest” function (use CTRL+F):

```
if deltaX < 0:  
    deltaX = -2  
elif deltaX > 0:  
    deltaX = 1
```

The horizontal speed and direction is determined by the value of “deltaX”. Can you see what the problem is? It’s not obvious but if you have an idea then try to change it and re-run the program to test it. Otherwise P.T.O...



The value assigned to deltaX determines the speed. A negative value is movement to the left and positive is movement to the right. And the magnitude (or size) of the number represents the speed. So -2 is twice the speed of +1. So this can be corrected by making the following change:

```
if deltaX < 0:  
    deltaX = -1  
elif deltaX > 0:  
    deltaX = 1
```

Run the program and check that the speed problem has been resolved. Does the ball now move to the left at the same speed as it does to the right?