

```
1 using Microsoft.Xna.Framework;
2 using System;
3 using System.Collections.Generic;
4 using System.Text;
5
6 namespace GameDemo.Shared
7 {
8     /// <summary>
9     /// different movement for the enemies
10    /// </summary>
11    public class Movement
12    {
13
14        public static Vector2 SinWave(Vector2 position, double magnitude, double
            frequency, GameTime gameTime, ref float timeOnScreen)
15        {
16            float transform;
17            timeOnScreen -= 0.007F;
18
19            transform = (float)(Math.Sin((double)(timeOnScreen*50) * frequency)
                * magnitude);
20            position.Y += transform;
21            return position;
22        }
23        public static Vector2 Bouncing(Vector2 position, float
            frequency, GameTime gameTime, ref float timeOnScreen)
24        {
25            if (position.Y < 500)
26            {
27                timeOnScreen += 0.01F*frequency;
28            }
29            else if(position.Y > 570)
30            timeOnScreen -= 0.01F*frequency*2;
31
32            float transform = position.Y * timeOnScreen/30;
33            position.Y = transform;
34            return position;
35        }
36    }
37 }
38
```