

```
// SunLightChecker.cs
```

```
using UnityEngine;
```

```
using System.Collections;
```

```
public class SunLightChecker : MonoBehaviour
```

```
{
```

```
    private GameObject[] m_Lights;
```

```
    public Vector3 offset;
```

```
    /// <summary>
```

```
    /// 何個の太陽に照らされているか
```

```
    /// </summary>
```

```
    private int m_IlluminatedCount;
```

```
    public int IlluminatedCount
```

```
    {
```

```
        get { return m_IlluminatedCount; }
```

```
        set { m_IlluminatedCount = value; }
```

```
    }
```

```
    void Start()
```

```
    {
```

```
        m_Lights = GameObject.FindGameObjectsWithTag("Sun");
```

```
    }
```

```
    void Update()
```

```
    {
```

```
        m_IlluminatedCount = 0;
```

```
        foreach (var light in m_Lights)
```

```
        {
```

```
            if (IsIlluminated(light))
```

```
            {
```

```
                m_IlluminatedCount++;
```

```
            }
```

```
        }
```

```
    }
```

```
    /// <summary>
```

```
    /// 引数で指定したLightに照らされているか？
```

```
/// </summary>
/// <param name="light">DirectionalLight</param>
/// <returns>true:照らされている。false:日陰</returns>
private bool IsIlluminated(GameObject light)
{
    Vector3 origin = transform.position + offset;
    Vector3 rayDirection = - light.transform.forward;

    // RayがHitしたということは、光が遮られたということ、つまり日陰。
    // RayがHitしなかったということはひなた。
    bool hit = Physics.Raycast(origin, rayDirection);

    return !hit;
}

public void OnDrawGizmos()
{
    Gizmos.DrawSphere(transform.position + offset, 0.2f);
}
}
```