

```

using UnityEngine;

public class Knife : MonoBehaviour
{
    // Public variable for knife speed (float type) - adjustable in Unity Inspector
    public float knifeSpeed = 15f;

    // Private variable to track if the knife has hit the target (bool type)
    private bool hasHitTarget = false;

    // Public variable for knife's level or rank (integer type)
    public int knifeLevel = 1;

    // Start is called once before the first execution of Update after the
    MonoBehaviour is created
    void Start()
    {
        Debug.Log($"Knife Level {knifeLevel} is ready to be thrown!");
    }

    // Update is called once per frame
    void Update()
    {
        // Conditional statement: If the knife has not hit the target, it continues to
        move upward
        if (!hasHitTarget)
        {
            transform.Translate(Vector2.up * knifeSpeed * Time.deltaTime);
        }
    }

    // Triggered when the knife collides with another object
    private void OnCollisionEnter2D(Collision2D collision)
    {
        if (collision.gameObject.CompareTag("Target"))
        {
            // Knife hits the target
            hasHitTarget = true;
            StickToTarget(collision.gameObject);
            Debug.Log($"Knife Level {knifeLevel} hit the target!");
        }
        else if (collision.gameObject.CompareTag("Knife"))
    }
}

```

```
{  
    // Knife hits another knife  
    Debug.Log("Game Over! Knife hit another knife.");  
    GameOver();  
}  
}  
  
// Method to handle the knife sticking to the target  
private void StickToTarget(GameObject target)  
{  
    transform.SetParent(target.transform); // Make the knife a child of the target  
    GetComponent<Rigidbody2D>().velocity = Vector2.zero; // Stop knife movement  
    GetComponent<Rigidbody2D>().isKinematic = true; // Disable physics for the  
knife  
}  
  
// Method to handle game over logic  
private void GameOver()  
{  
    // Placeholder for Game Over logic (e.g., show Game Over UI, stop the game)  
    Debug.Log("Game Over!");  
}  
}
```