



```

5
6 // Sets default values
7 AHealthSystemActor::AHealthSystemActor()
8 {
9     // Set this actor to call Tick() every frame. You can turn this off to improve performance if you don't need it.
10    PrimaryActorTick.bCanEverTick = true;
11    CurrentHealth = 100.0f;
12    MaxHealth = 100.0f;
13    HealAmount = 20.0f;
14    DefenseFactor = 2.0f;
15 }
16
17 // Called when the game starts or when spawned
18 void AHealthSystemActor::BeginPlay()
19 {
20     Super::BeginPlay();
21     UE_LOG(LogTemp, Warning, TEXT("--- INICIO EJERCICIO 6 ---"));
22
23     // Llamamos a las funciones
24     IncreaseHealth();
25     DecreaseHealth(50.0f);
26     DoubleMaxHealth();
27     CalculateReducedDamage(50.0f);
28
29     UE_LOG(LogTemp, Warning, TEXT("--- FIN EJERCICIO 6 ---"));
30 }
31
32
33 // Called every frame
34 void AHealthSystemActor::Tick(float DeltaTime)
35 {
36     Super::Tick(DeltaTime);
37 }
38
39
40
41 // SUMAR
42 void AHealthSystemActor::IncreaseHealth()
43 {
44     CurrentHealth = CurrentHealth + HealAmount;
45     UE_LOG(LogTemp, Warning, TEXT("SUMA: La salud ha aumentado a %f", CurrentHealth));
46 }
47
48 // RESTAR
49 void AHealthSystemActor::DecreaseHealth(float DamageAmount)
50 {
51     CurrentHealth = CurrentHealth - DamageAmount;
52     UE_LOG(LogTemp, Warning, TEXT("RESTA: La salud se ha reducido a %f", CurrentHealth));
53 }
54
55 // MULTIPLICAR
56 void AHealthSystemActor::DoubleMaxHealth()
57 {
58     MaxHealth = MaxHealth * 2.0f;
59     UE_LOG(LogTemp, Warning, TEXT("MULTIPLICAR: La salud maxima ahora es %f", MaxHealth));
60 }
61
62 // DIVIDIR
63 void AHealthSystemActor::CalculateReducedDamage(float IncomingDamage)
64 {
65     if (DefenseFactor != 0.0f)
66     {
67         float RealDamage = IncomingDamage / DefenseFactor;
68         UE_LOG(LogTemp, Warning, TEXT("DIVIDIR: El dano que se ha recibido %f se reduce a %f", IncomingDamage, RealDamage));
69     }
70 }

```

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LogTemp: Warning: --- INICIO EJERCICIO 6 ---
LogTemp: Warning: SUMA: La salud ha aumentado a 120.000000
LogTemp: Warning: RESTA: La salud se ha reducido a 90.000000
LogTemp: Warning: MULTIPLICAR: La salud maxima ahora es 200.000000
LogTemp: Warning: DIVIDIR: El dano que se ha recibido 50.000000 se reduce a 25.000000
LogTemp: Warning: --- FIN EJERCICIO 6 ---

```