```
 1  using UnityEngine;
 2
 3  public class Bullet : MonoBehaviour {
 4
 5      private Transform target;
 6
 7      public float speed = 70f;
 8      public int damage = 50;
 9      public float explosionRadius = 0f;
10      public GameObject impactEffect;
11
12      public void Seek (Transform _target) {
13          target = _target;
14      }
15
16      // Update is called once per frame
17      void Update () {
18          if (target == null) {
19              Destroy(gameObject);
20              return;
21          }
22
23          Vector3 dir = target.position - transform.position;
24          float distanceThisFrame = speed * Time.deltaTime;
25
26          if (dir.magnitude <= distanceThisFrame) {
27              HitTarget();
28              return;
29          }
30
31          transform.Translate(dir.normalized * distanceThisFrame, Space.World);
32          transform.LookAt(target);
33      }
34
35      void HitTarget () {
36          GameObject effectIns = (GameObject)Instantiate(impactEffect,
              transform.position, transform.rotation);
37          Destroy(effectIns, 5f);
38
39          if (explosionRadius > 0f) {
40              Explode();
41          }
42          else {
43              Damage(target);
44          }
45
46          Destroy(gameObject);
47      }
48
49      void Explode () {
50          Collider[] colliders = Physics.OverlapSphere(transform.position,
              explosionRadius);
51          foreach (Collider collider in colliders) {
```

```
52              if (collider.tag == "Enemy") {
53                  Damage(collider.transform);
54              }
55          }
56      }
57
58      void Damage (Transform enemy) {
59          Enemy e = enemy.GetComponent<Enemy>();
60
61          if (e != null) {
62              e.TakeDamage(damage);
63          }
64      }
65
66      void OnDrawGizmosSelected () {
67          Gizmos.color = Color.red;
68          Gizmos.DrawWireSphere(transform.position, explosionRadius);
69      }
70  }
71
```