Directions

- **Complete Chapter 9 "Basic AI and Enemy Behavior"** in the Learning C# textbook by Ferrone.
- You are expected to do everything in the chapter for this submission--and beware: the book doesn't always number the steps!
- The summary below is to help you know what to show in your recordings. It's NOT a substitute to reading the chapter.

Chapter 9 Summary in Brief

1. Select **Environment**, click arrow icon next to Static, choose **Navigation Static** (Yes, change children). Window > AI > **Navigation**, select Bake tab, click **Bake**. You'll see a new folder inside the Scenes folder with lighting, navigation mesh, and reflection probe data [In the Assets folder I saw a folder named after my project, containing only a NavMesh]

2. Create Empty GameObject **Patrol_Route**. Add Empty child GameObjects (**Location_1, 2, 3, 4**), move each to a corner of the ground.

3. Enemy moves from one Location to next, infinite loop: EnemyBehavior script has a `public List<Transform>` variable to hold all the Locations, and `MoveToNextPatrolLocation()` method. In Hierarchy drag the Patrol_Route in. Run the game to see the list populate. Add code to advance to **next location** and **loop back** to first location.

4. EnemyBehavior makes NavMeshAgent **pursue Player if they get close**: in `OnTriggerEnter(Collider other)`, if Player set `_agent.destination = Player.position;`

5. Enemy contact damages Player: PlayerBehavior **lowers `_gameManager.HP` by 1** `OnCollisionEnter` `if(collision.gameObject.name == "Enemy")`

6. Bullet can damage and kill an Enemy: EnemyBehavior sets up 3 lives per enemy, **Collision with a Bullet** lowers by 1, destroys it when 0.

7. Create a **Loss Condition button**. GameBehavior says **if(_playerHP <= 0)** stops game, shows Progress text, and makes LossButton SetActive(). Possibly refactor win/loss.