Scenario: Zoo Simulation

Exercise Steps:

1. Base Class (Animal):

- Properties: `Name`, `Age`

- Method: `virtual void MakeSound()` - prints a generic sound.

- Method: `virtual void DisplayInformation()` - prints the name and age.

2. First Level of Inheritance (Mammal, Bird):

- Mammal adds a property `IsDomestic`.

- Bird adds a property `WingSpan`.

3. Second Level of Inheritance (Carnivore, Herbivore for Mammals; FlightBird, FlightlessBird for Birds):

- Carnivore adds a method `Hunt()`.

- Herbivore adds a method `Graze()`.

- FlightBird adds a method `Fly()`.

- FlightlessBird might override `MakeSound()` to something specific.

4. Third Level of Inheritance (Specific Animals like Lion, Elephant, Eagle, Penguin):

- Lion could override `MakeSound()` with a roar.

- Elephant, Eagle, and Penguin would have specific implementations too.

5. Interface (IInteractive):

- Include methods like `Interact()` to show how a visitor might interact with the animal.

6. Console UI Application:

- Allow the user to create instances of these animals.

- Store created animals in an array of type `Animal`.

- Let the user select an animal to display its information or interact (if it implements `IInteractive`).

Console UI Interaction:

1. Menu Options:

- Create an animal.

- Display all animals.

- Interact with an animal (if it implements `IInteractive`).

2. Creating Animals:

- Prompt the user to choose a type of animal to create, then ask for the specific properties based on the chosen type.

3. Displaying Animals:

- Iterate over the array and call `DisplayInformation()`.

4. Interacting with Animals:

- If the animal implements `IInteractive`, call `Interact()`.