**1. Command Phase GA: Strategem Optimization**

* **Goal**: Optimize the selection and timing of Stratagems to maximize tactical advantage.
* **Representation**: Each individual in the population represents a sequence of Stratagems activated at specific times or under specific conditions.
* **Fitness Function**: Measures the effectiveness of Stratagem sequences based on outcomes like victory points gained, enemy units neutralized, or friendly units preserved.
* **Operators**:
  + **Selection**: Choose the sequences that lead to better outcomes more frequently for reproduction.
  + **Crossover**: Combine parts of two parent sequences to produce offspring sequences.
  + **Mutation**: Occasionally alter a Stratagem or its conditions in a sequence to explore new strategies.

**2. Movement Phase GA: Unit Maneuvering**

* **Goal**: Determine the optimal paths and positions for units to maximize battlefield control and minimize exposure to enemy fire.
* **Representation**: Each individual encodes the movements and final positions of all units.
* **Fitness Function**: Evaluates the control of key objectives, line-of-sight advantages, and exposure to potential enemy attacks.
* **Operators**:
  + **Selection**: Favor individuals that secure objectives and advantageous positions without unnecessary risk.
  + **Crossover**: Combine movement patterns from two parents.
  + **Mutation**: Slightly alter a unit's path or destination.

**3. Shooting Phase GA: Target Selection**

* **Goal**: Optimize target selection for all shooting units to maximize enemy attrition.
* **Representation**: Each individual represents a set of target assignments for each shooting unit.
* **Fitness Function**: Assesses the reduction in enemy combat effectiveness, considering the value and threat of eliminated or damaged units.
* **Operators**:
  + **Selection**: Prefer target assignments that lead to significant reductions in enemy capabilities.
  + **Crossover**: Mix target selections from two parents.
  + **Mutation**: Change the target for a given shooter to explore alternative focuses.

**4. Charge Phase GA: Assault Planning**

* **Goal**: Optimize which units to charge and from which direction to maximize combat effectiveness and minimize overextension.
* **Representation**: Individuals encode the decision of whether each unit charges, and if so, its target and route.
* **Fitness Function**: Evaluates success in engaging in favorable combat, causing enemy casualties, and holding strategic positions post-charge.
* **Operators**:
  + **Selection**: Pick the most successful assault plans for reproduction.
  + **Crossover**: Merge assault decisions from two parents.
  + **Mutation**: Alter a charge decision or target.

**5. Fight Phase GA: Combat Engagement Strategy**

* **Goal**: Determine the optimal sequence and targets of melee attacks to maximize damage to the enemy while preserving your units.
* **Representation**: Each individual represents an order and selection of units to engage in melee, along with their targets.
* **Fitness Function**: Measures the effectiveness of melee engagements based on damage dealt, key enemy units neutralized, and friendly unit preservation.
* **Operators**:
  + **Selection**: Prefer sequences that achieve significant combat victories.
  + **Crossover**: Combine engagement orders from two parents.
  + **Mutation**: Change an engagement target or order in the sequence.