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# BREAKPOINT CODING CHALLENGE

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## Methods



## The Pit Fighters

For this exercise, you are going to create a two-player game where each player has five fighters that must do battle in a pit arena with a select number of weapons.

### **Set-Up**

Each player gets to name five fighters. Each battle will consist of one fighter from each team fighting in the arena. Each player can select the weapon their fighter will use for each battle. The weapon selection will determine the results of the battle.

The weapons to select from are:

- Crossbow
- Spear
- Sword and Shield
- Warhammer
- Dagger

### **Battle Set Up**

- Before every battle, each player is shown their remaining fighters
- A fighter from each team is randomly chosen
- The player can select the weapon for their fighter
  - o This choice needs to be private for each player
  - o Invalid selections must be handled
- One the players have selected their weapons, the battle begins

## **Battle Results**

Your application will determine the results of the battle based on the weapons that were selected. The following table shows you which weapon wins in a pairing.

|              | Crossbow      | Spear       | Sword & Shield | Warhammer     | Dagger        |
|--------------|---------------|-------------|----------------|---------------|---------------|
| Crossbow     | Both Die      | Spear wins  | S/S wins       | Crossbow wins | Crossbow wins |
| Spear        | Spear wins    | Both Die    | S/S wins       | Spear wins    | Dagger wins   |
| Sword Shield | S/S wins      | S/S wins    | Both Die       | WH Wins       | Dagger wins   |
| Warhammer    | Crossbow wins | Spear wins  | WH Wins        | Both Die      | WH Wins       |
| Dagger       | Crossbow wins | Dagger wins | Dagger wins    | WH Wins       | Both Die      |

When a fighter dies, they are no longer eligible for battle.

## **End Game**

When a player runs out of fighters, they have lost the game. Make sure there is a message telling them so.

Ask the players if they want to play again. If they do, restart the game with a new batch of fighters. If they don't, exit the application.

## **Methods**

Since this exercise is about creating methods, here are some rules your code must follow

- The Main method can only do three things
  - o Call a method to start the game
  - o Inquire about playing another game
  - o Call a method to exit the application
- At the minimum, you must have methods for the following
  - o Playing the game
  - o Exiting the game
  - o Handling the battle mechanics
  - o Displaying the battle results