

Question 2

In the context of a Pokemon battle, you are tasked with modifying the method `determineWinner(String name)` to ascertain the winners from each type of Pokemon when facing a specific opponent. The method should return an array with a size of 3, representing the names of Pokemon that can triumph over the specified opponent from different types.

The expected format of the array is as follows:

```
String[] winners = {Flame-type Pokemon, Grass-type Pokemon,  
Water-type Pokemon};
```

However, there is a condition where no Pokemon from a particular type can defeat the opponent. In such cases, you should return the String "no Pokemon" at the specific index in the array.

Test Program

```
public class PokemonTest {  
    public static void main(String[] args) {  
        Pokemon moltres = new Pokemon("Moltres", "Flame",  
85.0);  
        Pokemon servine = new Pokemon("Servine", "Grass",  
60.0);  
        Pokemon charmander = new Pokemon("Charmander",  
"Flame", 92.0);  
        Pokemon pansage = new Pokemon("Pansage", "Grass",  
55.0);  
        Pokemon araquanid = new Pokemon("Araquanid", "Water",  
74.0);  
        Pokemon flareon = new Pokemon("Flareon", "Flame",  
65.0);  
        Pokemon squirtle = new Pokemon("Squirtle", "Water",  
63.0);  
        Pokemon wooper = new Pokemon("Wooper", "Water",  
42.0);  
  
        Pokemon[] PokemonList = {moltres, servine,  
                                charmander, pansage, araquanid, flareon,  
squirtle,  
                                wooper};  
        PokemonSortingSystem sortingSystem = new  
PokemonSortingSystem(PokemonList);  
        System.out.println("List of Pokemon after Sorting:  
");  
        for (Pokemon pokemon : PokemonList) {
```

```

        System.out.println(pokemon);
    }
    System.out.println();

    determineWinners("Squirtle",sortingSystem.determineWinner("Sq
uirtle", PokemonList),PokemonList);

    determineWinners("Charmander",sortingSystem.determineWinner("
Charmander", PokemonList),PokemonList);

    determineWinners("Flareon",sortingSystem.determineWinner("Fla
reon", PokemonList),PokemonList);
    }

    public static void determineWinners(String opponentName,
String[] winners, Pokemon[] PokemonList){
        System.out.println("Pokemon effective against " +
opponentName + ":");

        System.out.printf("%15s%15s%15s\n","Flame","Grass","Water");
        for (String winner : winners) {
            System.out.printf("%15s",winner);
        }
        System.out.println("\n");
    }
}

```

Sample Output

```

List of Pokemon afterSorting:
Wooper
Pansage
Servine
Squirtle
Flareon
Araquanid
Moltres
Charmander

Pokemon effective against Squirtle:
        Flame           Grass           Water
    Charmender    Servine    Araquanid

```

Pokemon effective against Charmander:

Flame	Grass	Water
no Pokemon	no Pokemon	Araquanid

Pokemon effective against Flareon:

Flame	Grass	Water
Charmander	no Pokemon	Araquanid