Butterfly

Language/Type: Java classes constructors Critters fields implementing inheritance instance methods
Related Links: Critter.java
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("Critter" classes come from the University of Washington's CSE 142 Critters homework assignment. See the assignment spec for more information.)

Define a `Critter` class named `Butterfly` with the following behavior:

constructor	`public Butterfly()`
color	yellow (`Color.YELLOW`)
eating behavior	never eats (this is the default behavior)
fighting behavior	always forfeits (this is the default behavior)
movement behavior	moves N, W, N, E, then repeats
`toString`	alternates between "x" and "–" on each move

Type your solution here:

```
public class Butterfly extends Critter {
    private int move;

    public Butterfly(){
        move = 1;
    }

    public Color getColor(){
        return Color.YELLOW;
    }

    public Direction getMove(){
        // N W N E repeat
        if (move > 4){
            move = 1;
        }
```

```
17
18          if (move == 1 || move == 3){
19              move++;
20              return Direction.NORTH;
21          } else if (move == 2) {
22              move++;
23              return Direction.WEST;
24          } else {
25              move++;
26              return Direction.EAST;
27          }
28      }
29
30      public String toString(){
31          if (move % 2 != 0) {
32              return "x";
33          } else {
34              return "-";
35          }
36
37      }
38
39
40  }
```

This is an **inheritance problem.** Write a Java class using inheritance. (You do not need to write any `import` statements.)

4 Indent

Sound F/X

Highlighting

Submit

You passed 4 of 4 tests.

test #1:	`constructor`
console output:	
result:	pass
test #2:	`getColor`
console output:	`"yellow"` `"yellow"` `"yellow"`
result:	pass
test #3:	`toString`
console output:	`toString after 20 moves: "x-x-x-x-x-x-x-x-x-x-"`

result:	pass

test #4:	`getMove`
console output:	`Butterfly 1 getMove: "NWNENWNENWNENWNENWNENWNE"` `Butterfly 2 getMove: "NWNENWNENWNENWNENWNENWNE"`
result:	pass

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