Paul Kwak Software Design 9/11/18 HW2

- 1. In which class and method is the strategy going to be set?
 - The strategy is going to be set in the behavior class named HorseBehavior, so that each strategy can override the interface's method.
- 2. What will your strategy hierarchy look like? Will you use an abstract base class or an interface? What methods will strategy classes include? (Note: While I provided you with an initial interface you can choose whether you like to keep the interface or replace with a super class)
 - I'll use an interface, because I need to implement a method for each strategy.
- 3. What other classes will you need?
 - I'll need a Horse class for its attributes, a Race class to run a race looping through each horse, a Main class to run a race, and a RaceTest class to check different outcomes of potential races.
- 4. Where will you put the control loop for the race?
 - I'll put the control loop in the Race class, but the actual distance will be updated in each strategy method.
- 5. What data structure will you use to manage horses in the race? The design rationale you write will likely be about one paragraph (maybe two) explaining your decisions. You could use these questions as an outline if you wish.
 - I'll use an array since there's a max limit of 5 horses. Also, for each strategy, I'll pass in the Horse class itself to update its distance and the time passed so that the race is not in charge of that. Merely, it's only in charge of iterating through each horse and what it needs to do.