



MORE SNACKS

Write code and tests for an automatic bike with the following requirements:

1. The Bike can be turned on

2. The Bike can be turned off

3. The Bike can be accelerated

- a) When the bike is on Gear one, it accelerates in increment of 1,(eg, if my current speed is 15 and I accelerate, I expect the speed to be 16)
- b) When the bike is on Gear two, it accelerates in increment of 2,(eg, if my current speed is 24 and I accelerate, I expect the speed to be 26)
- c) When the bike is on Gear three, it accelerates in increment of 3,(eg, if my current speed is 35 and I accelerate, I expect the speed to be 38)
- d) When the bike is on Gear four, it accelerates in increment of 4,(eg, if my current speed is 44and I accelerate, I expect the speed to be 48)

4. The Bike can be decelerated.

- a) When the bike is on Gear one, it decelerates in decrements of 1,(eg, if my current speed is 15 and I decelerate, I expect the speed to be 14)
- b) When the bike is on Gear two, it decelerates in decrement of 2,(eg, if my current speed is 24 and I decelerate, I expect the speed to be 22)
- c) When the bike is on Gear three, it decelerate in decrement of 3,(eg, if my current speed is 35 and I decrement, I expect the speed to be 32)
- d) When the bike is on Gear four, it decelerate in decrement of 4,(eg, if my current speed is 44and I accelerate, I expect the speed to be 40)

5. Gear speed are in the following range:

- a) **Gear 1:** 0 - 20 b)**Gear 2:** 21 - 30 c) **Gear 3:** 31 - 40 d) **Gear 4:** 41 and above

These gear changes automatically as soon as the bike gets exceeds any of these speed ranges either through acceleration or deceleration.

Biko use TDD to develop this... Please create a table as seen in snack 1.