



## 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.***