Quiz: Property Based Testing 2

Recall the following three properties (in Scala Check) from Chapter 8:

```
1 implicit val intList: Arbitrary[List[Int]] =
2    Arbitrary (Gen.listOf (Gen.choose (0,100)))
3
4 forAll { (ns: List[Int]) => ns.reverse.reverse == ns) }
5 forAll { (ns: List[Int]) => ns.headOption == ns.reverse.lastOption) }
6 forAll { (ns: List[Int]) => ns.reverse == ns) }
```

1. Show the changes necessary in the setup so that the second property can be written:
   `forAll ((ns: List[Int]) =>ns.head ==ns.reverse.last)`
2. Write a property stating that a sum of a list of positive numbers is a positive number.

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6 forAll { (ns: List[Int]) => ns.reverse == ns) }
```

1 Show the changes necessary in the setup so that the second property can be written:

```
implicit val intList: Arbitrary[List[Int]] =
  Arbitrary (Gen.listOf (Gen.choose (0,100)) filter {l => !l.isEmpty})
```

2pt - I'm good, 1pt - almost there, 0pt - heading Japan

2 Write a property stating that a sum of a list of positive numbers is a positive number.

```
implicit arbInt: Arbitrary[Int] =
  Arbitrary { implicitly[Int].arbitrary.map (n => Math.abs (n % 10000)) }
  forAll { ns: List[Int]) => ns.sum >= 0 }
```

2pt - I'm good, 1pt - almost there, 0pt - lost in Norway