1. Which of the `B.m` methods below are function subtypes of `A.m`? For each of the `B.m` methods answer whether the method would overload or override `A.m` in Java. Assume Z is a subclass of Y, and Y is subclass of X.

```
class A {
  Object m(X y, String s);
}

class B extends A {
  X m(X y, String s);           // function subtype, overrides
  Y m(Object y, Object s);      // function subtype, overloads
  Z m(Y y, String s);           // NOT function subtype, overloads
}
```

2. For each pair of specifications below, answer whether the extending class is a true subtype of its superclass. Explain your answer.

```
class Triangle
class IsoscelesTriangle extends Triangle
      No. IsoscelesTriangle surprises client with behavior that is different
      from Triangle's. Triangles are expected to have sides that can change
      independently, but the overriding setSides() function causes
      IsoscelesTriangle to violate that expectation. In other words,
      IsoscelesTriangle cannot substitute Triangle.


abstract class Vertebrate extends Animal
class Squid extends Vertebrate
      No, because while Vertebrate.neckBones() is guaranteed to return value
      > 0, Squids.neckBones() returns 0. This is a violation of a property
      guaranteed by its supertype.

class Human extends Vertebrate
      Yes, because Vertebrate.neckBones() is guaranteed to return value > 0,
      and Human.neckBones() returns 7, which does not violate the property
      guaranteed by its supertype.


class Bicycle
class MountainBike extends Bicycle
      Yes, because MountainBike does not modify the existing methods and
      properties of Bicycle, and only adds new, independent ones. This means
      all properties guaranteed by the supertype also holds in the subtype.

class Account
class ConcurrentAccount extends Account
      No, because the overriding deposit() function declares an additional
      exception that is not expected by clients of Account.
```