Test plan

1. Define a class called Hawks that extends prey; And create an object from that. In the constructor, define all its instance variables like below:

```
this.type = "Hawks";

this.specific_c = new String[] {"sharp, curved talons"};

this.isExtinct = false;

this.numberOfWings = 2;

this.food = new Food[] {Food.smallMammals, Food.insects};
```

(1) Test getType(), getCharacteristic(), isExtinct(), getNumberOfWings() and getFood() method; Use assertEquals to see if the actual output matches expected output.

Same test Logic is applied for class Eagles, Osprey, Emus, Kiwis, Moas… since they're pretty much the same location in this hierarchy tree.

2. Define a class called Owls that directly extends AbstractBirds; And create an object from that. In the constructor, define all its instance variables like below:

```
this.type = "Owls";

this.characteristic = new String[] {"round, forward-looking eyes"};

this.isExtinct = false;

this.numberOfWings = 2;

this.food = new Food[] {Food.fish, Food.otherBirds, Food.insects};
```

(1) Test is the same as above. Test five methods using assertEquals.

Same test Logic is applied for class Pigeons.

3. For the class RoseRingParrots that extends Parrots class:

```
this.type = "Roseringparakeet";

this.specific_c = new String[] {"rose colored ring"};
```

```
this.isExtinct = false;

this.numberOfWings = 2;

this.food = new Food[] {Food.smallMammals, Food.insects};

this.numberOfWords = 20;

this.favoriteSaying = "hello";
```

Apart from the above methods, test getNumberOfWords() and getFavoriteSaying method as above. Same for the class of other parrots.

4. Create a class GreatAuk, its constructor should be:

```
super("ocean");

this.type = "GreatAuk";

this.specific_c = new String[] {""};

this.isExtinct = false;

this.numberOfWings = 2;

this.food = new Food[] {Food.smallMammals, Food.insects};

this.nameOfWaterBody = "ocean";
```

Besides the common five methods that need to be tested, add one more: getNameOfWaterBody() using assertEqual method.

Other classes that at same location in the tree should use same test method.