Week 6 - Reference I.T 7

Demonstrate the use of polymorphism in a program - the first screenshot shows the edible interface, a simple class which will be implemented by other classes to allow them to be type Edible.

```
public interface Edible {
}
```

The images below show the classes implementing the Edible interface.

```
public class Salmon implements Edible {
}
```

```
public class Steak implements Edible{
}
```

```
public class TopHat implements Edible {
}
```

In the bear class below we can now have the method eat which accepts anything of type Edible, so we can pass in any of the three classes above that implement it instead of needing to handle them separately.

```java
public class Bear{

    private ArrayList<Edible> belly = new ArrayList<~>();

    public void eat(Edible food){
        if (!isBellyFull()){
            belly.add(food);
        }
    }

    public int foodCount() { return belly.size(); }

    public boolean isBellyFull() { return (foodCount() >= 10); }

}
```