Complete the **`Animal`** class by:

- Overriding the equals method that is inherited from Object

Complete the **`Person`** class by:

- Extending **`Animal`**
- Completing the constructor
- Overriding the **`toString`** method inherited from Animal such that it returns: "I am an Animal object with N legs and a Person object whose name is XX", where N is replaced with the correct number of legs for the **`Animal`** and XX with the correct name for the **`Person`**.
- Overriding the equals method that is inherited from Animal
- Writing a **`getPaid`** method that increases the **`accountBalance`** by an amount specified by a parameter to the method.

Complete the **`Professor`** class by:

- Extending **`Person`**
- Completing the constructor
- Overriding the **`toString`** method inherited from Person such that it returns: "I am an Animal object with N legs and a Person object whose name is XX and a Professor object with a YY dollar mortgage and ZZ", where N is replaced with the correct number of legs for the **`Animal`**, XX with the correct name for the **`Person`**, YY with the mortgage amount, and ZZ is "tenure" or "no tenure", depending on the tenure instance variable.
- Override the **`getPaid`** method inherited from **`Person`**. This method will apply 25% of the value passed in to decreasing the mortgage amount, and use the remaining amount to increase the **`accountBalance`**. Be sure the mortgage amount does not become negative.

Complete the **`Student`** class by

- Extending **`Person`**
- Completing the constructor
- Overriding the **`toString`** method inherited from Person such that it returns: "I am an Animal object with N legs and a Person object whose name is XX and a Student object with a YY gpa and ZZ dollars of student loans.", where N is replaced with the correct number of legs for the **`Animal`**, XX with the correct name for the **`Person`**, YY with the student GPA, and ZZ is the amount of student loan.
- Override the **`getPaid`** method inherited from Person. This method will apply 10% of the value passed in to decreasing the student loan amount, and use the remaining amount to increase the **`accountBalance`**. Be sure the student loan amount does not go negative.

## Additional instructions:

- You may add getter methods ONLY IF NEEDED
- Put common functionality as high in your class inheritance tree as possible
- If a given method is not needed – delete it.