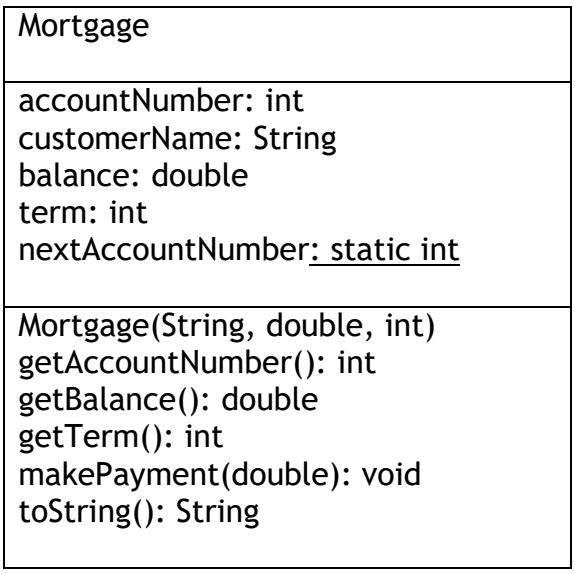
1. Write a `Mortgage` class as outlined in the below UML class diagram. The variable `nextAccountNumber` is a `static` variable. The variable `term` represents the term in months (a 10 year mortgage would have a term of 120 months)



2. Write a tester class which uses an `ArrayList` to store 5 `Mortgage`s. The class should print out details of each item in the `ArrayList`.

```
All Mortgages:
AccNum: 1001, Customer Name: Max, Term: 120, Balance: 250000.0
AccNum: 1002, Customer Name: Riley, Term: 240, Balance: 100000.0
AccNum: 1003, Customer Name: Daphne, Term: 240, Balance: 375000.0
AccNum: 1004, Customer Name: Reginald, Term: 120, Balance: 120000.0
AccNum: 1005, Customer Name: Gemima, Term: 240, Balance: 70000.0
```

3. Add code so that you can make a payment to a particular `Mortgage`.

```
Enter a mortgage number: 1003
Enter an amount to pay: 1000
AccNum: 1003, Customer Name: Daphne, Term: 240, Balance: 374000.0
```

4. Add code so that the program prints out the highest and lowest balances.

```
The highest balance: 374000.0
The lowest balance: 70000.0
```

5. Add code so that the user is asked to enter a term in years. The program will print out details of all `Mortgage`s with that term, as well as the number of `Mortgage`s with that term.

```
Enter a mortgage term in years: 20
AccNum: 1002, Customer Name: Riley, Term: 240, Balance: 100000.0
AccNum: 1003, Customer Name: Daphne, Term: 240, Balance: 374000.0
AccNum: 1005, Customer Name: Gemima, Term: 240, Balance: 70000.0
There are 3 mortgages with a term of 20 years
```