

Name: _____

In a bank, there are three types of accounts: `FixedAccount`, `InterestAccount`, `InterestPlusFixedAccount`. All the accounts, no matter what the type is, have an account number and a balance. Accounts also have a method named `getYearlyIncome` that returns the income obtained from that account, calculated as explained in the table below. Accounts also have a `toString()` method that prints account-related information.

Account Type	Yearly income	Output of <code>toString()</code>
<code>Account</code>		Account Number: <i>number</i> Balance: <i>balance</i>
<code>FixedAccount</code>	if <i>balance > threshold</i> <i>fixedIncome</i> else 0	Fixed Account Number: <i>number</i> Balance: <i>balance</i> Threshold: <i>threshold</i> Income: <i>fixedIncome</i>
<code>InterestAccount</code>	<i>balance*interestRate</i>	Interest Account Number: <i>number</i> Balance: <i>balance</i> Interest rate: <i>interestRate</i>
<code>InterestPlusFixedAccount</code>	<i>balance*interestRate</i> + if <i>balance > threshold</i> <i>fixedIncome</i> else 0	Interest Plus Fixed Account Number: <i>number</i> Balance: <i>balance</i> Threshold: <i>threshold</i> Income: <i>fixedIncome</i> Interest rate: <i>interestRate</i>

Your task in this question is to design and implement the following classes: `Account`, `FixedAccount`, `InterestAccount`, `FixedPlusInterestAccount`. Try to have as much code reuse as possible.