**Name: Session:**

**Programming I**

**Classes and Objects in Python**

**Lab Exercise 10.24.2023**

**When you have completed these programs, submit your source code.**

1. Make a class definition for a BankAccount. It should have attributes for its name (a string), account number (a string or integer), and balance (a float). It should have methods to display the balance, make deposits, and make withdrawals. Write a Python program that uses the BankAccount class and tests all methods.
2. Make a class called InterestAccount that earns interest. It should be a subclass of BankAccount (so it inherits the attributes and methods). It should also have an attribute for interest rate, and a method to add interest. To keep things simple, assume that the addInterest() method will be called once each year to calculate the interest and update the balance. Write a Python program that uses the InterestAccount class and tests all methods.
3. In your starter code folder, there is a file called accounts.dat. Write a program that creates an empty list called accounts that will hold interest bearing accounts. Read in the data from the file and add it to the list. Finally, print out the contents of the list of accounts. The accounts are stored in the disk file one record per line.
4. Now make an interest payment to all account holders, update the accounts.dat file and print the accounts.