Assignment: MySavings
Course: CSE2130 - File Structures and Exception Handling

Error - File couldn't be created.

```
30
31          //PiggyBank account = new PiggyBank();
32
33          //Read data from file and process
34          try
35          {
36
37              FileOutputStream out = new FileOutputStream(bankFile);
38              ObjectOutputStream write = new ObjectOutputStream(out);
39
40              //Write objects to file
41              write.writeObject(new PiggyBank());
42
43              write.close();
44              out.close();
45
46              FileInputStream in = new FileInputStream(bankFile);
47              ObjectInputStream read = new ObjectInputStream(in);
48
49              //Read objects
50
51              PiggyBank account = (PiggyBank)read.readObject();
52
53              while(userChoice != 0)
54              {
55
56                  if (userChoice == 2)
57                  {
58                      System.out.println("Enter amount of pennies: ");
59                      amt = input.nextInt();
60
61                      account.Add(amt, 0, 0, 0);
62
63                  }
64                  else if (userChoice == 3)
65                  {
66                      System.out.println("Enter amount of nickels: ");
67                      amt = input.nextInt();
68
69                      account.Add(0, amt, 0, 0);
```

Problems @ Javadoc Console Git Staging

```
<terminated> MySavings [Java Application] C:\Program Files\Eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_
1. Show total in bank
2. Add a penny
3. Add a nickel
4. Add a dime
5. Add a quarter
Enter 0 to quit
Enter your choice:
2
File could not be created.
IOException: Mastery.PiggyBank
```

Solution - Separated where the user interacts with the PiggyBank object and where the object/file output/input stream is by using methods.

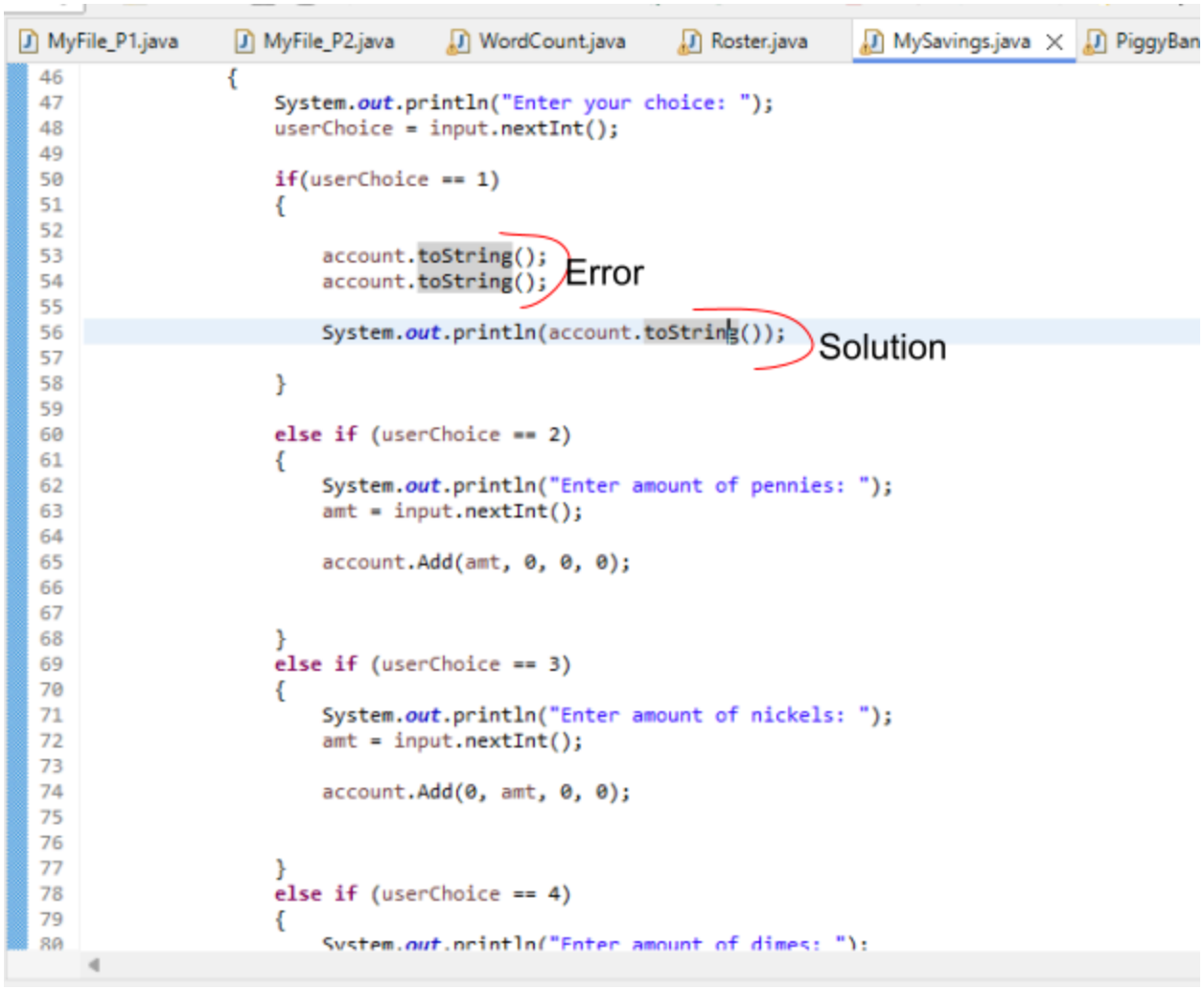
```java
    //Save and load to file methods for PiggyBank object

    // Method to save object to file with output stream
    private static void save(PiggyBank account)
    {
        try (ObjectOutputStream writeAcc = new ObjectOutputStream(new FileOutputStream(bankFile)))
        {
            writeAcc.writeObject(account);
            System.out.println("PiggyBank saved successfully");
        }
        catch (IOException e)
        {
            System.out.println("File could not be created. Error saving PiggyBank");
            System.err.println("IOException: " + e.getMessage());
        }
    }

    // Method to load object from a file with input stream
    private static PiggyBank load()
    {
        try (ObjectInputStream readAcc = new ObjectInputStream(new FileInputStream(bankFile)))
        {
            return (PiggyBank)readAcc.readObject();
        }
        catch (IOException | ClassNotFoundException e)
        {
            // If the file doesn't exist, return new PiggyBank object
            System.out.println("No saved PiggyBank. Loading a new one.");
            return new PiggyBank();
        }
    }

}
```

Error - toString wouldn't print.
Solution - Had to add a System.out.print();




```
46              {
47                  System.out.println("Enter your choice: ");
48                  userChoice = input.nextInt();
49
50                  if(userChoice == 1)
51                  {
52
53                      account.toString();
54                      account.toString();
55
56                      System.out.println(account.toString());
57
58                  }
59
60                  else if (userChoice == 2)
61                  {
62                      System.out.println("Enter amount of pennies: ");
63                      amt = input.nextInt();
64
65                      account.Add(amt, 0, 0, 0);
66
67
68                  }
69                  else if (userChoice == 3)
70                  {
71                      System.out.println("Enter amount of nickels: ");
72                      amt = input.nextInt();
73
74                      account.Add(0, amt, 0, 0);
75
76
77                  }
78                  else if (userChoice == 4)
79                  {
80                      System.out.println("Enter amount of dimes: ");
```

Error - PiggyBank object wouldn't load from the file.
Solution - Had to use the load method instead of creating a new PiggyBank each time the code ran.

- Error is the comment, solution isn't

```
public static void main(String[] args)
{

    int userChoice = 0, amt;
    Scanner input = new Scanner(System.in);

    //PiggyBank account1 = new PiggyBank();

    PiggyBank account = load();
```

```java
    // Method to load object from a file with input stream
    private static PiggyBank load()
    {
        try (ObjectInputStream readAcc = new ObjectInputStream(new FileInputStream(bankFile)))
        {
            return (PiggyBank)readAcc.readObject();
        }
        catch (IOException | ClassNotFoundException e)
        {
            // If the file doesn't exist, return new PiggyBank object
            System.out.println("No saved PiggyBank. Loading a new one.");
            return new PiggyBank();
        }
    }

}
```