

1. File Not Found for Saving/Loading Piggy Bank

- **Error:** `FileNotFoundException: piggy_bank.dat` (No such file or directory)
- **Cause:** Missing or incorrect file path.
- **Fix:**
 - Use an absolute file path for reliability.
 - Example: Replace "`piggy_bank.dat`" with "`C:/Users/YourName/Documents/piggy_bank.dat`".

2. Serialization Issue

- **Error:** `java.io.NotSerializableException: PiggyBank`
- **Cause:** The `PiggyBank` class does not implement `Serializable`.
- **Fix:**
 - Add `implements Serializable` to the `PiggyBank` class definition.
 - Ensure non-serializable fields are marked `transient` if not essential for saving/loading.

3. Invalid User Input

- **Error:** `InputMismatchException` for non-integer menu choices or non-numeric withdrawal values.
- **Cause:** The program expects numeric input but receives invalid data.
- **Fix:**
 - Validate input with `scanner.hasNextInt()` before reading.
- Example:

```
if (scanner.hasNextInt()) {  
    int choice = scanner.nextInt();  
} else {  
    System.out.println("Please enter a valid number.");  
}
```
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4. Permissions Issue

- **Error:** `IOException: Permission denied`
- **Cause:** Insufficient write permissions for the specified directory.
- **Fix:**
 - Save files in user-accessible directories (e.g., home directory).

- Run the program with elevated permissions if required.

5. Data Loss When Taking Money

- **Error:** Incorrect amount remaining after withdrawal.
- **Cause:** Insufficient checks for edge cases or floating-point precision issues.
- **Fix:**
 - Check funds availability before deductions.
 - Use `BigDecimal` for financial calculations to ensure precision.

6. Class Version Mismatch

- **Error:** `InvalidClassException` when loading data.
- **Cause:** Class changes after file serialization, leading to a mismatch in versions.
- **Fix:**
 - Add a `serialVersionUID` to the `PiggyBank` class.
- **Example:**

```
private static final long serialVersionUID = 1L;
```

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