

**Question:**

Implement the Error Check List?

1. ALL Variables declared?

2. Default attributes understood?

3.Arrays and strings initialized properly?

4.Correct lengths, types nd storage classes assigned?

5. Initialization consistent with storage class?

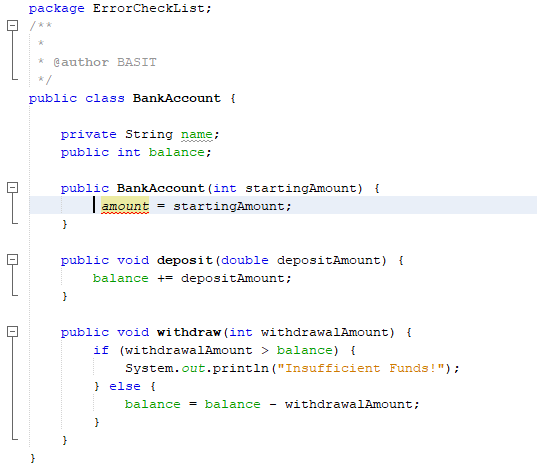
6. Any variables with simialr names?

implement a scenerio for this list …….

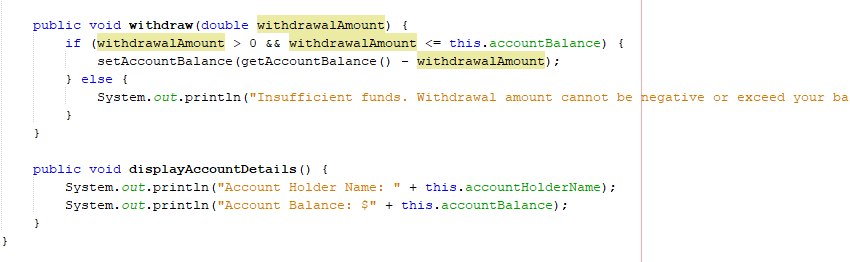
**Answer:**

**Scenario:** Simple Bank Account Example:

**Incorrect Code:**



**Correct Code:**



|  |  |
| --- | --- |
| All Variables Declared | |
| Incorrect Version | **Correct Version** |
|  |  |
| The variable “amount” that is being used in the constructor is not declared. | In this version of code all the variables are declared. |

|  |  |
| --- | --- |
| Default attributes are understood | |
| Incorrect Version | **Correct Version** |
|  |  |
| The variable “balance” is declared with public int and its default value is zero (0) which might not be intended. | The variable “accountBalance” is declared in this version of code whose initial value is initialized when its object Is created. |

|  |  |
| --- | --- |
| Incorrect Type/Length Assignment | |
| Incorrect Version | **Correct Version** |
|  |  |
| The deposit Amount is of the type int while the balance is of the double type. This may lead to data loss. | In this version of code the deposit Amount is of correct type (i.e double) |

|  |  |
| --- | --- |
| Inconsistent initialization | |
| Incorrect Version | **Correct Version** |
|  |  |
| The “balance” is not being initialized in the constructor, relying on default value. | In this version of code the “accountBalance” is being initialized in the constructor. |

|  |  |
| --- | --- |
| Similar names of variables | |
| Incorrect Version | **Correct Version** |
| A screenshot of a computer code  Description automatically generated |  |
| The “balance” & “amount” can be confused. | In this version of code the “accountBalance” is being used and amount is removed. |

Test Cases:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case Id | Test Case Description | Test Input Data | Expected Output | Actual Output | Verdict |
| TC\_001 | The amount will be stored in the declared variable. | account Balance=10,250 | Amount saved. |  |  |
| TC\_002 | The amount can be stored even if it is in decimal value. | account Balance = 100.12 | Amount saved. |  |  |
| TC\_003 | To check that the amount entered is added successfully into the current balance without data loss due to incorrect type. | deposit Amount=10.12 | Amount added to current balance successfully |  |  |
| TC\_004 | To check that at the creation of an account there is no variable, which is relying on the default value. | account Balance=0 | Account Created Successfully |  |  |
| TC\_005 | To Check that there is no confusion between the variable names. | account Balance=100  amount =10 | Current Balance shows the balance in account while the amount shows the amount to be added. |  |  |