Code Assessment

1. An ATM program is developed to check card type as the ATM will accept payment with

Master Cards only would you mention what is the best practice for this piece of code:

If(Card.Type == “Premium”)

Return False;

Else If(Card.Type == “Master”)

Accept Transaction;

Else if(Card.Type == “Youth”)

Return False;

Else

Return Error;

**Solution:**

* **Use explicit boolean values instead of strings to represent the validity of the card. For example, instead of returning "False", the code should return "false".**
* **Use an "if-else if-else" statement instead of multiple "if" statements. This makes the code more readable and efficient.**
* **Use a switch statement instead of if-else if-else statements in case there are more card types to check.**

public enum CardType {

PREMIUM,

MASTER,

YOUTH,

UNKNOWN

}

public boolean processTransaction(CardType cardType) {

switch (cardType) {

case PREMIUM:

case YOUTH:

return false;

case MASTER:

acceptTransaction();

return true;

default:

return false;

}

}

private void acceptTransaction() {

// Accept transaction logic

}

**2.Find the error in the following piece of code:**

int n = 0;

While( n<10) {

int a =n+2;

int b =a+n;

System.out.println(“a = ”+a);

n=5;

}

System.out.println(“a = “+a);

System.out.println(“b = “+b);

System.out.println(“n = “+n);

**Solution:**

There are a few errors in the code snippet provided:

1. The keyword "While" should be lowercase: "while".
2. The loop condition should be "n < 10" instead of "n<10".
3. The variable "a" is redefined inside the loop, so it won't be accessible outside the loop.
4. The variable "b" is defined inside the loop but accessed outside the loop, so it will throw a compilation error.
5. The last three print statements are trying to access variables "a", "b", and "n" outside their scope, which will result in compilation errors.

**int n = 0;**

**while (n < 10) {**

**int a = n + 2;**

**int b = a + n;**

**System.out.println("a = " + a);**

**n = 5;**

**}**