**Code Assessment**

**Question 1**

**Using Switch is a better**

* **It is more readable and performs well in these cases because it directly jumps to the matching case.**
* **can be slightly faster due to how it optimizes branching internally.**

**We can use also Enum to make code safer because:**

* **Enums prevent errors like mistyping a string and ensure only valid card types are used.**
* **Enums are easier to manage when adding new card types, and you get compile-time checking.**

**The new code is:**

**public enum CardType {**

**Premium, Master, Youth**

**}**

**switch (Card.Type) {**

**case "Premium":**

**return false;**

**case "Master":**

**acceptTransaction();**

**break;**

**case "Youth":**

**return false;**

**default:**

**return error;**

**}**

**Question 2**

**The mistake in this point**

* **Changed While to while.**
* **It is better to Move the declaration of a and b outside the loop to make them accessible after the loop if need to use later outside the loop**
* **Update the loop to increment n correctly to because it is an infinite loop.**
* **Corrected the use of double quotes in the System.out.println() statements change ( “ to " ) .**

**The correct code is**

**int n = 0;**

**int a = 0, int b = 0; // it’s better to declare a and b out side the loop if need to use them in later**

**while (n < 10) {**

**a = n + 2;**

**b = a + n;**

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

**n++; /\* example to increment n by 1 or the loop will be infante it can be different to increment to decrement depending on what is required to satisfy the condition and end the loop properly \*/**

**}**

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

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

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