Pseudo Code

Step 1: Import scanner util

Step 2: Take card number as String from user

Step 3: Pass card number through Method for Luhn’s algorithm

Step 4: Create two empty strings (“a” and “b”)

Step 5: Pass card number through loop to pull every other digit

Step 6: Store every other digit to String “a”

Step 7: Create int array “a”

Step 8: Store each char in string “a” into separate element of integer array using loop

Step 9: Pass array through loop to get sum of digits in “a”

Step 10: Pass original card number through loop to pull remaining digits

Step 11: Store remaining digits to string “b”

Step 12: Create another int array “b”

Step 13: Store each char in string “b” to element of int array “b” and multiply by 2

Step 14: Pass elements in int array “b” through loop to find sum of digits

Step 15: Add sum of array “a” to sum of array “b”

Step 16: If total sum mod 10 has 0 remainder the card number is valid

Step 17: Card number is valid pass through method to determine card company

Step 18: If card number length is 15 digits long and starts with “34” or “37” the card is AMEX

Step 19: If card number length is 16 digits and starts with a “4” the card is VISA

Step 20: If card number length is 16 and starts with “51” “52” “53” “54” “55” card is MASTERCARD

Step 21: If card number length is 13 and starts with “4” the card is VISA

Step 22: If none of these requirements are met the card may be invalid or it might be discover in which case we need another 6 hours and more requirements to find out if its discover

Thanks for reading \*mwah hugs\*