Reverse.java

import java.util.\*;

class ReverseCalculator {

int num;

int reversedNumber = 0;

// For loop code

int forLoopfunction(int num) {

for (; num != 0; num /= 10) {

int digit = num % 10;

reversedNumber = reversedNumber \* 10 + digit;

}

return reversedNumber;

}

// While loop code

int WhileLoop(int num) {

while (num != 0) {

int digit = num % 10;

reversedNumber = reversedNumber \* 10 + digit;

num /= 10;

}

return reversedNumber;

}

// do while loop code

int DoWhileLoop(int num) {

do {

int digit = num % 10;

reversedNumber = reversedNumber \* 10 + digit;

num /= 10;

} while (num != 0);

return reversedNumber;

}

}

public class Reverse {

public static void main(String[] args) {

ReverseCalculator rc = new ReverseCalculator();

Scanner input = new Scanner(System.in);

System.out.print("Enter a Number and I will reverse it: ");

rc.num = input.nextInt();

int mode, reverse;

System.out.println("Your Choice?\n1\tFor Loop\n2\tWhile Loop\n3\tDo While Loop");

mode = input.nextInt();

if (mode == 1) {

reverse = rc.forLoopfunction(rc.num);

System.out.println("The reverse of number using for is " + reverse);

} else if (mode == 2) {

reverse = rc.WhileLoop(rc.num);

System.out.println("The reverse of number using while is " + reverse);

} else {

reverse = rc.DoWhileLoop(rc.num);

System.out.println("The reverse of number using do while is " + reverse);

}

input.close();

}}

OUTPUT:

PS C:\Users\bhoir\OneDrive\Desktop\java folder>

Enter a Number and I will reverse it: 24

Your Choice?

1 For Loop

2 While Loop

3 Do While Loop

2

The reverse of number using while is 42

LuckyOrArm.java

import java.util.Scanner;

class LuckyOrArmStrong {

int digit;

boolean ArmStrong(int num) {

int sum = 0, tmp = num;

// For loop

for (; num != 0; num /= 10) {

digit = num % 10;

sum += (digit \* digit \* digit);

}

return sum == tmp;

}

boolean Lucky(int num) {

int sum = 0, k = 0;

for (; num != 0; num /= 10) {

digit = num % 10;

if (k % 2 == 0) {

sum += digit \* digit;

}

k += 1;

}

return (sum % 9 == 0) ? true : false;

}

}

public class LuckyOrArm {

public static void main(String[] args) {

int num = 0, ch = 0;

LuckyOrArmStrong LAS = new LuckyOrArmStrong();

Scanner sc = new Scanner(System.in);

System.out.println("What's Your Number?");

num = sc.nextInt();

System.out.println("1. Calculate ArmStrong\n2. Calculate Lucky Number");

System.out.print("Your Choice is ");

ch = sc.nextInt();

switch (ch) {

case 1:

if (LAS.ArmStrong(num))

System.out.print("The number " + num + " is an ArmStrong Number");

break;

case 2:

if (LAS.Lucky(num))

System.out.print("The number " + num + " is a Lucky Number");

break;

default:

System.out.println("Oops! Invalid Choice!");

break;

}

sc.close();

}

}

OUTPUT:

PS C:\Users\bhoir\OneDrive\Desktop\java folder> javac LuckyOrArm.java

PS C:\Users\bhoir\OneDrive\Desktop\java folder> java LuckyOrArm

What's Your Number?

153

1. Calculate ArmStrong

2. Calculate Lucky Number

Your Choice is 1

The number 153 is an ArmStrong Number

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PS C:\Users\bhoir\OneDrive\Desktop\java folder> java LuckyOrArm

What's Your Number?

1623

1. Calculate ArmStrong

2. Calculate Lucky Number

Your Choice is 2

The number 1623 is a Lucky Number

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PS C:\Users\bhoir\OneDrive\Desktop\java folder> java LuckyOrArm

What's Your Number?

51

1. Calculate ArmStrong

2. Calculate Lucky Number

Your Choice is 1