Script started, output file is computingGCD\_output

elijahkorneffel@Elijahs-MacBook-Pro  ~/Git/CS2261-JAVA/Project2   project2\_03\_02\_19  cat ComputingGCD.java

//Class: CS2261-JAVA

//Due Date: 03/04/19

//Author: Elijah Korneffel

//Description: This script finds gcm of unspecified number of integers

import java.util.Scanner;

public class ComputingGCD

{

public static void main(String[] args)

{

Scanner input = new Scanner(System.in);

System.out.println("Enter 5 integer numbers to compute gcd:");

System.out.println("Integer1:");

int integer1 = input.nextInt();

System.out.println("Integer2:");

int integer2 = input.nextInt();

System.out.println("Integer3:");

int integer3 = input.nextInt();

System.out.println("Integer4:");

int integer4 = input.nextInt();

System.out.println("Integer5:");

int integer5 = input.nextInt();

int output = gcd(integer1, integer2, integer3, integer4, integer5);

System.out.printf("The gcd is: %d ", output);

}

//This method receives integer numbers and returns the integer gcd [0/512]

public static int gcd(int... numbers)

{

int gcd = 1; //Make initial gcd 1

int k = 2; //Guess of next gcd

for(int i = 0; i < numbers.length - 1; i++)

{

gcd = 1; //reset gcd to 1

k = 2; //reset gcd

while(k <= numbers[i] && k <= numbers[i + 1])

{

if(numbers[i] % k == 0 && numbers[i + 1] % k == 0)

{

gcd = k; //update gcd

}

k++;

}

numbers[i + 1] = gcd; //place the gcd in the next spot of the array

}

return gcd;

}

}

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Enter 5 integer numbers to compute gcd:

Integer1:

10

Integer2:

15

Integer3:

20

Integer4:

30

Integer5:

40

The gcd is: 5 %

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Script done, output file is computingGCD\_output