PART 1:

package lab\_4;

import java.util.Scanner;

public class Lab4Part1 {

public static double cTof(){

Scanner kb = new Scanner(System.in);

System.out.print("Enter Celsius: ");

double celsius = kb.nextDouble();

return 9\*celsius/5+32;

}//cTof

public static double fToc(){

Scanner kb = new Scanner(System.in);

System.out.print("Enter Fahrenheit: ");

double fahrenheit = kb.nextDouble();

return (fahrenheit - 32) \* 5/9;

}//fToc

public static int operator (int a, int b, char ch){

/\* Scanner kb = new Scanner(System.in);

System.out.print("Enter first number: ");

a = kb.nextInt();

System.out.print("Enter second number: ");

b = kb.nextInt();

System.out.print("Enter operator");

String c = kb.next();

\*/

switch (ch){

case '+': return a+b;

case '\*': return a\*b;

case '-': return a-b;

case '/': return a/b;

case '%': return a%b;

default: return 0;

}//Switch

}//operator

public static double operator2(double a, double b, char ch){

Scanner kb = new Scanner(System.in);

System.out.print("Enter first number: ");

a = kb.nextDouble();

System.out.print("Enter second number: ");

b = kb.nextDouble();

System.out.print("Enter operator");

String c = kb.next();

switch (ch){

case '+': return a+b;

case '\*': return a\*b;

case '-': return a-b;

case '/': return a/b;

case '%': return a%b;

default: return 0;

}//switch

}//operator

public static int sumOfDigits(int num){

Scanner kb = new Scanner(System.in);

System.out.print("Enter a number: ");

num = kb.nextInt();

int sum = 0;

while (num > 10){

int pick = num%10;

sum+=pick;

num = num/10;

}//while

sum += num;

return sum;

/\*\*

\*

\* @author gawitt

\*/

}

public static void main(String[] args) {

System.out.println(cTof());

System.out.println(fToc());

System.out.println(operator(12,2,'\*'));

System.out.println(operator2(3.0,6.0,'+'));

System.out.println(sumOfDigits(894));

}//Main

}//class

Output:

run:

Enter Celsius: 50

122.0

Enter Fahrenheit: 120

48.888888888888886

24

Enter first number: 12

Enter second number: 2

Enter operator \*

14.0

Enter a number: 25

7

BUILD SUCCESSFUL (total time: 22 seconds)

Lab\_4\_part\_2:

/\*

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\* and open the template in the editor.

\*/

package lab\_4;

/\*\*

\*

\* @author gawitt

\*/

public class Lab\_4\_Part2 {

public static void a(){

System.out.println("\t\ta in \n");

System.out.println("\t\ta out \n");

}//a

public static void b(){

System.out.println("\tb in \n");

Lab\_4\_Part2.a();

System.out.println("\tb out \n");

}//b

public static void c(){

System.out.println("c in \n");

Lab\_4\_Part2.a();

Lab\_4\_Part2.b();

System.out.println("c out \n");

}//c

public static void main(String[] args) {

System.out.println("main in \n");

Lab\_4\_Part2.a(); // calls a method a in and a out

Lab\_4\_Part2.b();// calls b in and b out then runs the A method in and out

Lab\_4\_Part2.c(); // calls method a and b which both come in and out of the program

System.out.println("Main out \n");

}//main

}//class

Output:

run:

main in

a in

a out

b in

a in

a out

b out

c in

a in

a out

b in

a in

a out

b out

c out

Main out

BUILD SUCCESSFUL (total time: 0 seconds)

Lab\_4\_Part3

package lab\_4;

/\*\*

\*

\* @author gawitt

\*/

public class Lab\_4\_Part3 {

public static boolean isAscending(int a, int b, int c){

if (a > b|| b > c)

return false;

return true;

}

public static void main(String[] args) {

int num1 = 12;

int num2 = 25;

int num3 = 35;

if (isAscending(num1,num2,num3)){

System.out.println("The numbers: " + num1 + "," + num2 + "," + num3);

System.out.println("Are in ascending order.");

}//If

else{

System.out.println("The Numbers: " + num1 + "," + num2 + "," + num3 );

System.out.println("Are not in ascending order.");

}//else

}//main

}//class

Output:

run:

The numbers: 12,25,35

Are in ascending order.

BUILD SUCCESSFUL (total time: 0 seconds)

Second Test:

package lab\_4;

/\*\*

\*

\* @author gawitt

\*/

public class Lab\_4\_Part3 {

public static boolean isAscending(int a, int b, int c){

if (a > b|| b > c)

return false;

return true;

}

public static void main(String[] args) {

int num1 = 35;

int num2 = 25;

int num3 = 35;

if (isAscending(num1,num2,num3)){

System.out.println("The numbers: " + num1 + "," + num2 + "," + num3);

System.out.println("Are in ascending order.");

}//If

else{

System.out.println("The Numbers: " + num1 + "," + num2 + "," + num3 );

System.out.println("Are not in ascending order.");

}//else

}//main

}//class

Output:

run:

The Numbers: 35,25,35

Are not in ascending order.

BUILD SUCCESSFUL (total time: 0 seconds)