Program Meclaurin Menghitung

import java.util.Scanner;

import java.lang.Math;

class Meclaurin{

public static void main(String[] args) {

int n, x0=0, hasil=0 ;

double hasilcos, k, x, pangkat, temp, total =0;

Scanner scan = new Scanner(System.in);

System.out.print("Masukkan Nilai X = ");

x = scan.nextDouble();

System.out.print("Masukkan Suku ke-n = ");

n = scan.nextInt();

double y = x-x0;

Meclaurin fac = new Meclaurin();

for(int i=0; i<=n; i++){

pangkat = (double)Math.pow(x, i);

if(i%4==0){

hasilcos = (double)Math.cos(x0);

}else if(i%4==1){

hasilcos = (double)-Math.sin(x0);

}else if(i%4==2){

hasilcos = (double)-Math.cos(x0);

}else{

hasilcos = (double)Math.sin(x0);

}

k = pangkat/fac.factorial(i);

temp = hasilcos\*k;

total = total+temp;

}

System.out.println("\n\nHasilnya \t= "+total);

System.out.println("cos Hasil \t= "+Math.cos(0.2));

System.out.println("Ea \t\t= "+(Math.cos(0.2)-total));

}

public int factorial(int bil){

if(bil<=1){

return 1;

}else{

return bil\*factorial(bil-1);

}

}

}

