public class Fibonacci {

public static void main(String[] args) {

Fibonacci aFibonacci = new Fibonacci();

aFibonacci.printFiboacciAndAverage(20);

}

private void printFiboacciAndAverage(int n) {

long fb1 = 1;

long fb2 = 1;

long fbn = 0;

long sum = 0;

if (n <= 0) {

System.out.println("Please correct number of items and try again.");

return;

}

System.out.println("The first " + n + " Fibonacci numbers are:");

for(int i = 1; i <= n; i++) {

switch (i) {

case 1: fbn = fb1; break;

case 2: fbn = fb2; break;

default:

fbn = fb1 + fb2;

fb1 = fb2;

fb2 = fbn;

}

sum += fbn;

System.out.print(fbn + " ");

}

System.out.println();

System.out.printf("The sum is %1$d \n", sum);

System.out.printf("The average is %.4f \n", (double)sum / n);

}

}

package javaexercises.arrays;

import java.util.Scanner;

public class GradesAverage {

private final int LOWEST\_GRADE = 0;

private final int HIGHEST\_GRADE = 100;

// student's grades

private int[] grades;

private Scanner in;

/\*\*

\* Enter program's point.

\*

\* @param args

\*/

public static void main(String[] args)

{

GradesAverage aGradesAverage = new GradesAverage();

aGradesAverage.in = new Scanner(System.in);

System.out.print("Enter the number of students: ");

int numStudents = aGradesAverage.in.nextInt();

aGradesAverage.run(numStudents);

}

/\*\*

\* Run program.

\*

\* @param numStudents

\*/

private void run(int numStudents)

{

if (numStudents <= 0) {

System.out.println("Invalid number of students.");

return;

}

grades = new int[numStudents];

double sum = 0;

int i = 0;

while (i < numStudents)

{

System.out.printf("Enter the grade for student %1$d: ", (i+1));

int grade = in.nextInt();

// chek if grade is between 0 and 100

if ((grade >= LOWEST\_GRADE) && (grade <= HIGHEST\_GRADE)) {

grades[i] = grade;

sum += grade;

i++;

continue;

}

System.out.println("Invalid grade, try again...");

}

System.out.printf("The average is %1$.2f\n", (sum / numStudents));

}

}

// Java program to illustrate copyof method

import java.util.Arrays;

public class Main

{

public static void main(String args[])

{

// initializing an array original

int[] org = new int[] {1, 2 ,3};

System.out.println("Original Array");

for (int i = 0; i < org.length; i++)

System.out.print(org[i] + " ");

// copying array org to copy

int[] copy = Arrays.copyOf(org, 5);

// Changing some elements of copy

copy[3] = 11;

copy[4] = 55;

System.out.println("\nNew array copy after modifications:");

for (int i = 0; i < copy.length; i++)

System.out.print(copy[i] + " ");

}

}