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/\* Lab 3 Question 4 \*/

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/\* This Program employs a do-while function \*/

/\* in order to conduct an average \*/

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#include<stdio.h>

int main()

{

//Declaration

int nValue = 1, sum = 1, num = 0, count = 1;

//Data/Input

printf("Enter the value of n : ");

scanf("%d", &nValue);

//Processing/Calculation

do

{

++count;//The count function will continue to count +1.

sum += count;//The sum variable is defined and assigned the value of count.

}

while (count < nValue);//While loop function will conduct the calculation untill the cound value reached the sentinel value.

float average;

average = sum / (float) nValue;

//Output

printf("The sum of first %d numbers = %d \n", nValue, sum);

printf("The average of first %d numbers = %.2f \n", nValue, average);//Precision set for average value to two decimal places.

getchar();

return 0;

}

//Output

//

//Test Run 1

//

//Enter the value of n : 18

//The sum of first 18 numbers = 171

//The average of first 18 numbers = 9.50

//

//Test Run 2

//

//Enter the value of n : 36

//The sum of first 36 numbers = 666

//The average of first 36 numbers = 18.50

//

//Test Run 3

//

//Enter the value of n : 72

//The sum of first 72 numbers = 2628

//The average of first 72 numbers = 36.50