Summation:

What is Summation? Addition of sequence results in their sum or total. That sum is Summation of the sequence.

So question is simple. Scan the array or list for the elements and add them. Now return the sum.

Below is the code for the summation of int[], float[] and double[].

**package** arrays;

**import** java.util.Arrays;

**public** **class** Summation {

**public** **static** **int** sum(**int**[] a) {

**int** sum = 0;

**for** (**int** i = 0; i < a.length; i++) {

sum = sum + a[i];

}

**return** sum;

}

**public** **static** **long** sum(**long**[] a) {

**long** sum = 0;

**for** (**int** i = 0; i < a.length; i++) {

sum = sum + a[i];

}

**return** sum;

}

**public** **static** **double** sum(**double**[] a) {

**double** sum = 0;

**for** (**int** i = 0; i < a.length; i++) {

sum = sum + a[i];

}

**return** sum;

}

**public** **static** **void** main(String[] args) {

**int**[] a = { 3, 2, 1, 4, 3, 2 };

**long**[] l = { 3, 2, 1, 4, 3, 2 };

**double**[] d = { 3, 2, 1, 4, 3, 2 };

System.***out***.println("int[] "+*sum*(a));

System.***out***.println("float[] "+*sum*(l));

System.***out***.println("double[] "+*sum*(d));

**int** sumInt=Arrays.*stream*(a).sum();

System.***out***.println("Stream int[] sum "+sumInt);

**long** sumLong=Arrays.*stream*(l).sum();

System.***out***.println("Stream long[] sum "+sumLong);

**double** sumDouble=Arrays.*stream*(d).sum();

System.***out***.println("Stream double[] sum "+sumDouble);

}

}

Output

int[] 15

float[] 15.0

double[] 15.0

Stream int[] sum 15

Stream long[] sum 15.0

Stream double[] sum 15.0

As of Java 8 we can use stream for calculating sum.

**int** sum=Arrays.*stream*(a).sum();

System.***out***.println(sum);

stream is overloaded method and can take int[], long[] and double[] as input.