1. Write two functions to compute and return the following summation $\sum_{a}^{b}i$. First function computes the summations and inserts it into an array and second function returns the values using the array. Prototype of the first function is given below.

```c
void precomputesummation(int data[], int n)
```

data is an array that will store computed values and n is the size of the array. Data[k] will have the following value stored in it $\sum_{1}^{k}i$. Compute all the values of data[k] inside this function. Note that you can compute all the values of the array using a single loop.

Prototype of the second function is given below. data is an integer array of precomputed values, n is the size of the array, a and b are the starting and ending indexes for the summation. The function computes $\sum_{a}^{b}i$ using the array and returns it.

```c
int findsummation(int data[], int n, int a, int b)
```

This function can be implemented without using a loop using values of the data array. Consider the following equation as a hint.

$$\sum_{1}^{b}i = \sum_{1}^{a-1}i + \sum_{a}^{b}i$$