

Practice assisted project phase 1

3. Write a program in Java to find the sum of n number of elements in the range of L and R where $0 \leq L \leq R \leq n-1$

```
package main;
import java.util.*;

public class demo {

    public static int findSum(int L, int R)
    {
        ArrayList<Integer> arr = new ArrayList<>();
        int i = 0;
        int x = 2;
        while (i <= R)
        {
            arr.add(i + x);

            if (i + 1 <= R)
                arr.add(i + 1 + x);

            x = x * (-1);
            i = i + 2;
        }

        int sum = 0;

        for(i = L; i <= R; ++i)
            sum += arr.get(i);

        return sum;
    }

    public static void main(String[] args)
    {
        int L = 0, R = 5;

        System.out.println(findSum(L, R));
    }
}
```

OUTPUT-

```
Console x
<terminated> demo [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (16-May-2023, 10:17:48 am – 10:17:48 am) [pid: 5152]
19
```