

$t_1, t_2, \dots, t_{i-1}, t_i, \dots, t_n$

$a+b = \dots$
 $\forall a, b \in \mathbb{R}$

$\Sigma_1 = t_1 + (t_1 + t_2) + \dots + (t_1 + \dots + t_{i-1}) + (t_1 + \dots + t_{i-1} + t_i) + (t_1 + \dots + t_{i-1} + t_i + t_{i+1}) + \dots$

$\Sigma_2 = t_1 + (t_1 + t_2) + \dots + (t_1 + \dots + t_{i-1}) + (t_1 + \dots + t_{i-1} + t_i) + (t_1 + \dots + t_{i-1} + t_i + t_{i+1}) + \dots$

Lemma

$\Sigma_2 < \Sigma_1 \Leftrightarrow t_i < t_{i-1}$

הוכחה
 קטן
 הנדסה
 להוכחה
 נראה
 כסדר
 דיון

Sort by java Arrays.sort(arr)

answer \rightarrow int Sum = 0;
 for(int i=0; i < arr.length; i++)
 int temp = temp + arr[i];
 Sum = Sum + temp;

1	3	5	19
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temp = 1 4 9 28
 Sum = 1 5 14 42

$T_1 = t_1 = 1$
 $T_2 = t_1 + t_2 = 4$
 $T_3 = t_1 + t_2 + t_3 = 9$
 $T_4 = t_1 + t_2 + t_3 + t_4 = 28$

\downarrow
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