

# Practice6

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# Question 1

- ▶  $n$  piles of stones are arranged around a playground. The stones are to be merged into **one pile** in order. **At least 2** piles and **at most  $k$**  piles of stones can be merged into a new pile at a time. The merger cost is the sum of the merged stones. The total cost is the sum of all intermediate results.
- ▶ Try to design an algorithm to calculate the maximum and minimum total cost of merging  $n$  piles of stones into one pile.

## Input

3 → the number of testcases  
3 4 → n  
3 4 → k  
1 2 3 → the number of stones  
5 3  
4 5 6 3 2  
6 4  
4 5 6 3 2 10

## Output:

11 6  
64 29  
120 39  
→ maximum and minimum total cost of test case 1



Please implement the question.

The practice will be checked in this lab class or the next lab class(before **Apr.20**) by teachers or SAs.

This practice will contribute **1 mark** to your overall grade. Late submissions within 2 weeks after the deadline (before Apr.13)will incur a 20% penalty, meaning that you can only get 80% of the score.