Problem-1: Milly is at the examination hall where she is reading a question paper. She checked the……. She decided to solve K questions while maximizing their score value. Could you please help Milly to determine the exact time she needs to solve the questions?

- Method of the solution: **Merge sort.**
- Reason for taking this method: Merge sort basically follows the divide and conquer algorithm. In this particular problem user will have N number of questions. The most important thing is that merge sort takes less time to solve the problem.

Problem-2: Limak is a brown bear. Brown bears often climb trees and so does Limak. As you probably know, bears use ropes to move……Limak is a brown bear. Brown bears often climb trees and so does probably know, bears use ropes to move between tops of trees.

- **Method of the solution:** Activity selection .
- **Reason for using this method:** For this problem the bear needs to climb the trees with the hopes. So there are some conditions for which it will check every tree to go on the next tree. Again we need minimum number of rope or the shortest length of rope for which we can find that the bear is going to cross all the trees.

Problem-3: Since getting dressed involves putting on various items of clothing, we'll need a subroutine put_on, that takes as……. input the temperature outside and select between three different outfits depending on whether it is cold, warm, or hot .

- **Method of the solution: Activity selection.**
- **Reason for using this method:** In the activity selection from we know that one problem or work cannot be done at other time. We have to do one work after finish we can start another. Here, some dresses are available, so when the dresses are chosen, we can get just one type of dresses at one time.