


Algorithmics	Student information	Date	Number of session
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## Activity 1. Validation results

The output of the *BestList* class with inputs 'List01' and '20' is:

```

Number of songs: 10

List of songs:
id: 0fmvy3 seconds: 4:40 score: 3842
id: 2lsdf9 seconds: 3:22 score: 3842
id: 06rwq3 seconds: 4:48 score: 3842
id: 3ld4R7 seconds: 4:27 score: 3475
id: 8id4R7 seconds: 4:27 score: 3475
id: 87UKo2 seconds: 3:27 score: 3475
id: 8j4gE3 seconds: 5:22 score: 2834
id: 9u4gE3 seconds: 6:59 score: 2834
id: 3j4yQ6 seconds: 5:2 score: 2834
id: 5rtZe9 seconds: 4:44 score: 2834

Length of the blocks: 20:0
Total score: 27619
Total counter: 392

Best block A:
id: 2lsdf9 seconds: 3:22 score: 3842
id: 3ld4R7 seconds: 4:27 score: 3475
id: 87UKo2 seconds: 3:27 score: 3475
id: 3j4yQ6 seconds: 5:2 score: 2834

Best block B:
id: 0fmvy3 seconds: 4:40 score: 3842
id: 8id4R7 seconds: 4:27 score: 3475
id: 06rwq3 seconds: 4:48 score: 3842
id: 8j4gE3 seconds: 5:22 score: 2834

```

The time complexity in the worst case would be  $O(n!)$ , because each time we select a song to be part of the solution the number of possible songs we can select after decreases by 1; ( $n = n - 1$ ), as we do not repeat a song on the blocks of the solution.