

## Programming Assignment 1

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### 1 Design and Implementation

#### 1.1 Task 1

#### 1.2 Task 2

#### 1.3 Extra credit

### 2 Answers

- (a) In this PA we asked you to use each sub-directory as a block and build index for one block at a time. Can you discuss the tradeoff of different sizes of blocks? Is there a general strategy when we are working with limited memory but want to minimize indexing time?
- (b) Is there a part of your indexing program that limits its scalability to larger datasets? Describe all the other parts of the indexing process that you can optimize for indexing time/scalability and retrieval time.
- (c) Any more ideas of how to improve indexing or retrieval performance?