In this paper, we report how we build the system for the Chinese subtask in NTCIR12 Short Text Conversation (STC) shared task. Our approach is to find the most related sentences for a given input sentence. The system is implemented based on the Lucene search engine. The result shows that our system can deal with the conversation that involves related sentences.

### System Flow

Our main approach to the task is to extract suitable search terms for each post and try to find comments with the search terms in the repository as the candidate responses. Our system then ranks the candidates according to the level or relevance and returns the top ten sentences as the system result for one input post.

### Relationship between posts and responses

By observing the training set, we find that there some communication types between the posts and their responses. Here we list 7 major types:

1. **Sympathy**
   - The response shows feelings of pity and sorrow for the misfortune in the post.
2. **Confirmation**
   - The response is confirming the opinion or information in the post.
3. **Reply information**
   - Whey post is a query for some kind of information, the response should be a reply to the question.
4. **Sarcasm**
   - Some response is laughing or deny the idea in the post.
5. **Nonsense**
   - Nonsense some time is a kind of humor; however, literally the response is nonsense.
6. **Ask back**
   - Some responses are questions that ask back the same thing in the posts.
7. **Envy**
   - Some response shows the feeling of envy to the post.

### Formal run

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<th>Run</th>
<th>Mean nDCG@1</th>
<th>Mean P@1</th>
<th>Mean nERR@10</th>
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<td>0.3851</td>
<td>0.3608</td>
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</tbody>
</table>

### Analogy Approach

A post A and a response B in the training set can be coupled to find the best response D for a test post C by the analogy A:B=C:D

### Case Studies

**Sympathy**

- train-post-10010
  - 昨天晚上程序挂掉了 (Last night, my process died.)
- repos-cmnt-1025251760
  - 親身經歷過的人默默無語過。(As a person with the same experience, I cannot say anything.)

**Sarcasm**

- test-post-10460
  - 上帝創造你有目的性，一是為了突出另外一種能力，是什麼？ (God created you with a purpose, is it for another ability, what can it be?)
- repos-cmnt-1043272930
  - 沒啥油 (Too much oil)

**Confirmation**

- test-post-10010
  - 远离城市，才得安宁。(Far from a city, get peace.)
- repos-cmnt-100093080
  - 感觉不错 (Feeling good)

**Nonsense**

- test-post-10130
  - 看到蓝蓝的，好天气saybye！ (See the blue sky finally! Say bye to the good weather)
- repos-cmnt-100359760
  - 可能不成功的，大家永远不会成功 (The one who don't want success will never get success)

**Reply information**

- test-post-10250
  - 有规矩，周末不谈PPT，有什么乐子可以大家谈谈？ (As old rules, don’t talk about PPT on weekend. Anything fun that we can talk about?)
- repos-cmnt-1022638290
  - 去网吧通宵 (Stay overnight at Internet café.)

**Ask back**

- test-post-10050
  - 一大早上，各种打哈欠的，有木有 (Early morning, yawning in every way, isn’t it)
- repos-cmnt-1000295940
  - 是吗？？ (Really???)

**Envy**

- test-post-10340
  - 重庆小雨，三五个人围着火锅！香死你了。 (Chongqing rain, three to five people sitting around the pot! Enjoy food.)
- repos-cmnt-1000965750
  - 好想吃啊 (Really want to eat.)

### Conclusion

The type of posts are also need to explore. There are many posts involved in social events and entertainments. The conversation is not just question answering, it also contains discussions on subjects in many cases. A proper response in these cases should be a confirmation on the opinion or give a counter question.