This term project is to implement a Q/A system based on stories by deep learning MemoryNet [1].

The CBT test set as reference [2] consists of training set, validation set and test set of natural language text of children story from many books. Each Q/A quiz is provided 20 sentences as context and the 21st sentence as question with one word marked as XXXX to be filled by the system. In training set, the correct answer is provided with the correct answer followed by 10 potential answers as example 1.

Example 1:

1 With almost everything else to make them happy , they wanted one thing : they had no children .

2 This vexed the king even more than the queen , who was very clever and learned , and who had hated dolls when she was a child .

3 However , she , too in spite of all the books she read and all the pictures she painted , would have been glad enough to be the mother of a little prince .

4 The king was anxious to consult the fairies , but the queen would not hear of such a thing .

5 She did not believe in fairies : she said that they had never existed ; and that she maintained , though The History of the Royal Family was full of chapters about nothing else .

6 Well , at long and at last they had a little boy , who was generally regarded as the finest baby that had ever been seen .

7 Even her majesty herself remarked that , though she could never believe all the courtiers told her , yet he certainly was a fine child -- a very fine child .

8 Now , the time drew near for the christening party , and the king and queen were sitting at breakfast in their summer parlour talking over it .

9 It was a splendid room , hung with portraits of the royal ancestors .

10 There was Cinderella , the grandmother of the reigning monarch , with her little foot in her glass slipper thrust out before her .

11 There was the Marquis de Carabas , who , as everyone knows , was raised to the throne as prince consort after his marriage with the daughter of the king of the period .

12 On the arm of the throne was seated his celebrated cat , wearing boots .

13 There , too , was a portrait of a beautiful lady , sound asleep : this was Madame La Belle au Bois-dormant , also an ancestress of the royal family .

14 Many other pictures of celebrated persons were hanging on the walls .

15 `` You have asked all the right people , my dear ? ''

16 said the king .

17 `` Everyone who should be asked , '' answered the queen .

18 `` People are so touchy on these occasions , '' said his majesty .

19 `` You have not forgotten any of our aunts ? ''

20 `` No ; the old cats ! ''

21 replied the queen ; for the king 's aunts were old-fashioned , and did not approve XXXXX her , and she knew it .   of   as|at|before|in|of|on|than|that|to|with

Your project is to train the meomoryNEt to learn how to select the correct answer for XXXX in the 21st sentence out the 10 possible after seeing 20 background sentences.

You should write the report of your project in the end of the semester and show how your system perform on test set.

The final exam is also given some similar Q/A question to test your system. The background stories will be given from some other children books.

Reference:

1. Sainbayar Sukhbaatar, Arthur Szlam, Jason Weston, Rob Fergus, End-To-End Memory Networks

2. The children book test link:

http://www.thespermwhale.com/jaseweston/babi/CBTest.tgz