## Practical No. 5

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## 1 Part 2

**e**)

Loading parameters of iter 10 GREEDY Current VALID LOSS: 0 Valid BLUES SCORE 0.2396838019 Valid Corpus Matches: 91.84% Valid Corpus Success: 60.20% Valid Total number of dialogues: 98 Current TEST LOSS: 0.0 Corpus BLUES SCORE 0.2428193872 Corpus Matches: 93.88% Corpus Success: 57.14% Total number of dialogues: 98 -BEAM Current VALID LOSS: 0 Valid BLUES SCORE 0.2431330542 Valid Corpus Matches: 91.84% Valid Corpus Success : 64.29%Valid Total number of dialogues: 98 Current TEST LOSS: 0.0 Corpus BLUES SCORE 0.2476875225 Corpus Matches: 93.88% Corpus Success: 60.20% Total number of dialogues: 98 TIME: 3.9095523357391357 f) Loading parameters of iter 10 GREEDY Current VALID LOSS: 0

Valid BLUES SCORE 0.2402353340

Valid Corpus Matches: 86.73% Valid Corpus Success: 63.27% Valid Total number of dialogues: 98

Current TEST LOSS: 0.0

Corpus BLUES SCORE 0.2325164968

Corpus Matches: 81.63% Corpus Success: 48.98% Total number of dialogues: 98

-----BEAM

Current VALID LOSS: 0

Valid BLUES SCORE 0.2376763596 Valid Corpus Matches: 86.73% Valid Corpus Success: 63.27%

Valid Total number of dialogues: 98

Current TEST LOSS: 0.0

Corpus BLUES SCORE 0.2365194855

Corpus Matches: 81.63% Corpus Success: 50.00% Total number of dialogues: 98 TIME: 4.103184700012207 After train and test rerun Loading parameters of iter 10

-GREEDY

Current VALID LOSS: 0

Valid BLUES SCORE 0.2502195127 Valid Corpus Matches: 91.84% Valid Corpus Success: 57.14% Valid Total number of dialogues: 98

Current TEST LOSS: 0.0

Corpus BLUES SCORE 0.2394296606

Corpus Matches: 86.73% Corpus Success: 52.04% Total number of dialogues: 98

—BEAM

Current VALID LOSS: 0

Valid BLUES SCORE 0.2507824854 Valid Corpus Matches: 91.84% Valid Corpus Success: 57.14% Valid Total number of dialogues: 98

Current TEST LOSS: 0.0

Corpus BLUES SCORE 0.2440719282

Corpus Matches: 87.76% Corpus Success: 53.06% Total number of dialogues: 98

## TIME: 4.0200865268707275

Surprisingly results are worse with softmax policy.

After retraining results improve, but are still worse than default policy.

## $\mathbf{g})$

BLEU score is a quick and simple way of evaluating dialogue systems. It shouldn't be the only metric for evaluating the model as it doesn't take into account synonymous words.