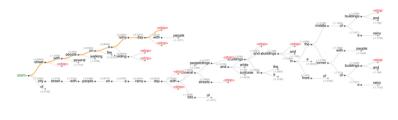# 1   Question 1

Our greedy decoding strategy is computationally efficient because, at each step, we search for the next word only one time (we select the word that has the highest probability). As a consequence, the translation quality is not as good as the beam decoding strategy where we generate multiple hypotheses at at a time.

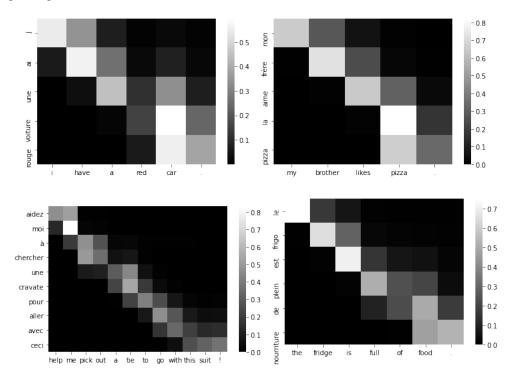Beam search decoder with k=3 and max steps as 51

2   Question 2

A major problem we observe in our translations is that some words or parts of the source sentence are not translated. In NMT, the decoding process ends when the end-of-sentence is mark (¡EOS¿ token). SO, there is no coverage vector to indicate whether a source word is translated or not.
We also notice that some words are translated for multiple time and some words are mistakenly untranslated which gives unstructured sentences in the target language.

3   Question 3

Source/target alignments :

We notice that score between the same word in source and target language is very high. The score of each word and its neighbors is also high.

4   Question 4

We notice that the word **mean** has different meanings in the two sentences, and NMT always predict the right word in the target language : **intention** for the first sentence and **méchant** for the second one. Thus, the model NMT is able to differentiate the meanings of homonyms to produce an adequately accurate translation in many fields.