

A Extractive Label Generation

The algorithm 1 is used to generate the extractive labels based on the human-made abstractive summaries, i.e. abstracts of scientific papers. The function ROUGE should return the rouge-1 F score of the given hypothesis text in regard to the reference, and the function NumberOfWords should return the number of words contained in the input sentence.

Algorithm 1 Extractive label generation

```
function LABELGENERATION(ref,sentences,lengthLimit)
    hyp = ""
    wc = 0
    picked = []
    highest_r1 = 0
    sid = -1
    while wc ≤ lengthLimit do
        for i in range(len(sentences)) do
            score = ROUGE(hyp + sentences[i],ref)
            if score > highest_r1 then
                highest_r1 = score
                sid = i
            end if
        end for
        if sid!=-1 then
            picked.append(sid)
            hyp = hyp+ sentences[sid]
            wc += NumberOfWords(sentences[sid])
        else
            break
        end if
    end while
    return picked
end function
```
