num\_beams=4,no\_repeat\_ngram\_size=4,top\_k=20

min\_length=200,max\_length=500

'rouge1': Score(precision=0.49244712990936557, recall=0.4478021978021978, fmeasure=0.4690647482014389), 'rouge2': Score(precision=0.13636363636363635, recall=0.12396694214876033, fmeasure=0.12987012987012986), 'rougeL': Score(precision=0.2054380664652568, recall=0.18681318681318682, fmeasure=0.19568345323741007)}

num\_beams=2,no\_repeat\_ngram\_size=2,top\_k=10

min\_length=100,max\_length=400

'rouge1': Score(precision=0.5259259259259259, recall=0.3901098901098901, fmeasure=0.4479495268138801), 'rouge2': Score(precision=0.1412639405204461, recall=0.1046831955922865, fmeasure=0.12025316455696203), 'rougeL': Score(precision=0.21851851851851853, recall=0.1620879120879121, fmeasure=0.1861198738170347)}

num\_beams=1,no\_repeat\_ngram\_size=1,top\_k=5

min\_length=50,max\_length=450

'rouge1': Score(precision=0.2874617737003058, recall=0.25824175824175827, fmeasure=0.272069464544139), 'rouge2': Score(precision=0.018404907975460124, recall=0.01652892561983471, fmeasure=0.01741654571843251), 'rougeL': Score(precision=0.0764525993883792, recall=0.06868131868131869, fmeasure=0.0723589001447178)}

num\_beams=3,no\_repeat\_ngram\_size=5,top\_k=15

min\_length=150,max\_length=450

'rouge1': Score(precision=0.5290519877675841, recall=0.47527472527472525, fmeasure=0.5007235890014472), 'rouge2': Score(precision=0.1687116564417178, recall=0.15151515151515152, fmeasure=0.15965166908563136), 'rougeL': Score(precision=0.21406727828746178, recall=0.19230769230769232, fmeasure=0.20260492040520983)}

num\_beams=4,no\_repeat\_ngram\_size=5,top\_k=20

min\_length=10,max\_length=300

{'rouge1': Score(precision=0.5792079207920792, recall=0.32142857142857145, fmeasure=0.4134275618374558), 'rouge2': Score(precision=0.19900497512437812, recall=0.11019283746556474, fmeasure=0.1418439716312057), 'rougeL': Score(precision=0.27722772277227725, recall=0.15384615384615385, fmeasure=0.19787985865724383)}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **num\_beams** | **no\_repeat\_ngram\_size** | **top\_k** | **min\_length** | **max\_length** | **rouge1** |
| 4 | 4 | 20 | 200 | 500 | 0.46 |
| 2 | 2 | 10 | 100 | 400 | 0.44 |
| 1 | 1 | 5 | 50 | 450 | 0.27 |
| 3 | 5 | 15 | 150 | 450 | 0.50 |
| 4 | 5 | 20 | 10 | 300 | 0.41 |