Kannada Extractive text summarization Result with Rouge metrics

Rouge 1 results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No of  sentences in  the input | Total no of words  in the system  summary | Total no of words  in the manual  summary | F1 Score | Recall | Precision |
| 11 | 56 | 45 | 0.6363636313785125 | 0.6730769230769231 | 0.603448275862069 |
| 20 | 74 | 81 | 0.6666666616669182 | 0.771428571 | 0.6619718309859155 |
| 30 | 111 | 105 | 0.6376811544204066 | 0.6407766990291263 | 0.6346153846153846 |
| 40 | 156 | 153 | 0.6293706243706295 | 0.729370629 | 0.6293706293706294 |
| 53 | 301 | 162 | 0.688405792101515 | 0.6909090909090909 | 0.6859205776173285 |
| **Average** |  |  | **0.6516975727875963** | **0.703663206** | **0.6430653396902655** |

Rouge 2 results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No of  sentences in  the input | Total no of words  in the system  summary | Total no of words  in the manual  summary | F1 Score | Recall | Precision |
| 11 | 56 | 45 | 0.46296295797839504 | 0.49019607843137253 | 0.43859649122807015 |
| 20 | 74 | 81 | 0.7179856065110502 | 0.5217391304347826 | 0.5142857142857142 |
| 30 | 111 | 105 | 0.4682926779269483 | 0.67058823529411764 | 0.46601941747572817 |
| 40 | 156 | 153 | 0.4507042203521127 | 0.4507042253521127 | 0.4507042253521127 |
| 50 | 301 | 162 | 0.6309090859091571 | 0.5328467153284672 | 0.5289855072463768 |
| **Average** |  |  | **0.5461709097355326** | **0.5332148769681705** | **0.47971827111760046** |

Rouge -l results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No of  sentences in  the input | Total no of words  in the system  summary | Total no of words  in the manual  summary | F1 Score | Recall | Precision |
| 11 | 56 | 45 | 0.6213592183127534 | 0.6530612244897959 | 0.5925925925925926 |
| 20 | 74 | 81 | 0.6666666616678146 | 0.676923076923077 | 0.6567164179104478 |
| 30 | 111 | 105 | 0.6421052581584488 | 0.648936170212766 | 0.6354166666666666 |
| 40 | 156 | 153 | 0.6245353109868577 | 0.6363636363636364 | 0.6131386861313869 |
| 50 | 301 | 162 | 0.6910569055704278 | 0.7024793388429752 | 0.68 |
| **Average** |  |  | **0.6491446709392604** | **0.6635526893664501** | **0.6355728726602188** |

# Average of three

|  |  |  |  |
| --- | --- | --- | --- |
| Rouge parameters | F1 Score | Recall | Precision |
| Rouge-1 | 0.6516975727875963 | 0.703663206 | 0.6430653396902655 |
| Rouge-2 | 0.5461709097355326 | 0.5332148769681705 | 0.47971827111760046 |
| Rouge-l | 0.6491446709392604 | 0.6635526893664501 | 0.6355728726602188 |
| **Average** | **0.6156710511541298** | **0.6334769241115402** | **0.5861188278226949** |

## Screen shot showing summarized words and manual words

**(system generated vs Reference words with nltk)**



