SEQUENCE OUTPUT TEST

GSI Bioinformatic Support 27 September, 2019

```
library(knitr)
formatDNA<-function(fasta.file){</pre>
  dna<-scan(fasta.file,what="character")</pre>
  dna < -dna[-1]
  dna<-paste(dna,collapse="")</pre>
  dna.lines<-strsplit(dna, '(?<=.{60})', perl = TRUE)[[1]]</pre>
  ### set the positions
  n<-60
  names(dna.lines) <- seq(from=1, by=n, length.out=length(dna.lines))
  dna.df<-as.data.frame(dna.lines)</pre>
  dna.chunked<-apply(dna.df,1,function(x){paste(strsplit(x, "(?<=.{10}))", perl = TRUE)[[1]],collapse="</pre>
  dna.chunked.df<-as.data.frame(dna.chunked)</pre>
  colnames(dna.chunked.df)<-NULL
  dna.chunked.df
}
fasta.file<-"dna.fasta"
dna<-formatDNA(fasta.file)</pre>
print(dna,right=FALSE)
```

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GCTCCCGGCT TAGAGGACAG CGGGGAAGGC GGGCGGTGGG GCAGGGGGCC TGAAGCGGCG
1
    GTACCGGTGC TGGCGGCGC AGCTGAGGCC TTGGCCGAAG CCGCGCGGTG AGTCTAGGGC
121 CTGGCACGAC CCCTCTAGGG CGGCGTAATG TCCAGACCCA CGGCCAGCCT GCCCGTGGGG
181 GGGCCAGGGG AAGCCGCCCG TCTGGGACGT GGGGTCCCCA CATTGCCGGC CCCACGACCT
241 GGGCACCGTC TGAGGCCTTG ACTCCCACCC CTCGAGGCAA CGCCCACCTC CCCGGGACCC
301 CCAAGAGACC CCTGGACCCT TCGGCCCGCG GTACGTCCGC CCGAAGGCCG GCCCATCAGC
361 TCTGGTATTG CCCTTTGGGT CTTTTGCCTG TCACAGCCAC CCTTTCTTTT GAGCCACGTA
421 TAAAAATTGT GTATCTCTGC CCCAGGGAAC ACTAGCGTCC GTGTCAGCCC CTTGTCCTCC
481 ACTGTGGACA CCTCTCAGAG ATCCAGTCCC CGAAACTGAG CTTGGTTACA TCGTTGGGGT
541 ACATCTTCTC TCCCTCTCCC CCAGCCCCAT CCCTGTTTCC CCCATCCAAT CTTAACTTCC
601 TTAAGCCCTA TCAACACCAT TAGGATATTT GACTTCAGAT ATCCTAAGTT TAATTGAATT
661 CAGTCTGGAG CAGATGGCCT GTGGGCCTCA GATCATATAA AGATACACTG GTTCTTTCCT
721 GAGAATAGAA ATCCCTTGCC AGCCACCTTC CCCCCTTTCG GACGCACACA CATACACACA
781 AACTGGAGTA GTTTTCTTAG CAGGGATTCT TAAGTTTCTT CTCCCCTAAA GGATGACATT
841 TCTTTCTGCA GTCTTCTTCT TGGCAGTGGA GTATTTGAAA GCTTTACAAA ACCAATTATT
901 CCCAGGTTTT TCCTCTGTGC CTTACAAAAT CTTTCAAAAA TAAGAATTTT GAGAAATTGG
961 TTTTGTAGCA TAAGCTGAAC ATACTTGGGA TAGGTGTATG TTACACCCAT GGCAGTGTGG
1021 GCATAATTGA GGAATGAGGG AATGAGCTCA GGAACTAATT GGTGTTTTTT GTTTTTTT
1081 GAGACGGAGT TTCGCTCTGT CGCCCAGGCT GGAGTGCAGT GGCTCGATCT CTGCTCACTG
1141 CAAGCTCCGC CTCCCGGGTT CCCGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAC
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1201	TACAGGCGCC	CGCCACCATA	${\tt CGGCTAATTT}$	TTTTTTTTTT	${\tt TTGTATTTT}$	AGTAGAGGCG
1261	GGATTTCACC	${\tt GTGTTGGCCA}$	${\tt GGATGGTCTC}$	${\tt GATTTCCTGA}$	${\tt CCTCGTGATC}$	CGCCCGCCTC
1321	GGCCTCCCAA	ACCCGGCCAG	${\tt GAACTAATTA}$	$\mathtt{CTTTCTTTTA}$	GCTTACATTT	GAAGAGCTAG
1381	TCCCCTGTAG	AACTGCGTTG	${\tt TTCAGTACAA}$	${\tt GAACCACCAG}$	${\tt CCACATGTGG}$	CTGTGGAGCA
1441	${\tt CTTGAAATGT}$	${\tt GACTAGTCCA}$	$\tt GGCCGGGCAT$	${\tt GGTGGCTCAC}$	${\tt ACCTGTAATC}$	CCAGCACTTT
1501	GGGAGGCCAA	$\tt GGCGGGCAGA$	${\tt TCACCTGAGG}$	${\tt TCAGGAATTT}$	${\tt GAGACCAGCC}$	TGGCCAACAT
1561	AATAAAACCC	${\tt CATCTCTACT}$	AAAACACAC	${\tt AAAAATTAGC}$	${\tt CAGGCGTGGT}$	GCTGCACATC
1621	TGTAGTCCCA	GCTACTCGGG	${\tt AAGCTGAGGC}$	${\tt AGGAGAATCA}$	${\tt TTTGAACCCG}$	GGAGGTGGAT
1681	GTTGCAGTGA	GCCGAGATCA	${\tt TGCCACTGCA}$	CTCCAGCCTG	GGTGACAGAG	CGAGACTCTG
1741	TCTCAAAAA	${\tt AAAAAAAAA}$	ATGACTAGTC	${\tt CAAATTGACA}$	${\tt TTGTTGTAAG}$	TGTAAAATGC
1801	ACATTAGATT	${\tt TTGAAGACTC}$	${\tt GCTAAAAAAA}$	${\tt AAGAATGGAC}$	${\tt ACTATATCAA}$	TTTTTTAAAT
1861	ATTGATAACA	TGTTGAAATG	${\tt ATATTTTGGA}$	${\tt TATATTGGTT}$	${\tt TAGGTAATTA}$	ATTTCACCTG
1921	TTTCTTTTTA	$\tt CCTTTTAAAA$	${\tt TATGGCTACA}$	AGCAGCCTTA	AAATTACATT	TGTGGATCAT
1981	TGTATTTCCT	CTTTTTTTT	${\tt TTTTTAATTG}$	AGATGGAGTT	TTGCTCTTGT	TGCCCAGGCT
2041	GTAGTGCAAT	GGCCCAATCT	CAGCTCACTG	CAACCTCTGC	CT	