

fastx-utils之截断序列：replace

一、fastx-utils replace介绍

功能描述：

`fastx-utils replace` 根据 `key/value` 键值对，修改序列的名字。

命令行接口：

```
1 $ fastx-utils replace
2
3 Usage: fastx-utils replace [options] <db> <fasta>
4
5 Options:
6   -r  remove unmapped sequence.
7   -c  remove comment.
```

可选参数：

```
1 -r  移除无映射序列；
2 -c  移除注释信息；
```

二、使用场景实例及其用法

示例演示：

示例文件： `protein.faa` `convert.txt`

```
1 $ cat protein.faa | head -n 8
```

```
1 >AGE80385.1
2 MKKIIIIISATTIVIGITSFAYFGSKTPLHNEAKAVESQKHNNHKKEEIPAFPKADHNAKKIDNDFS SVVTNP KSNLVL
  INKHRKLPDGYIPDLTRPNVPFISPKDKEKTL LRKDA AEAL ENMFKA AKKEGLDLTAVSGYRSYKRQKSLHDTYVR
  RQGKAEANSVSAIPGTSEHQTGLAMD ISSSKSAKFQLEPIFGETAEGKWVAEHAHEFGFVIRYLEDKTDTTEYAYEPW
  HLRYVGNPYATYLYKHHLTLEEAMEDKK
3 >AGE79558.1
4 MINHELVERINFLAKKAKAEGLTEEEQRERQSLREQYLKGFRQNMLNELKGIKVVNEEGTDVTP TKLKALKKQDNAK
  LN
5 >AGE81073.1
6 MDKVISNEILQQFKDRMLGDD EDANLR RILFASNKDLTRVCGNYDLNIDEVFKELVFERSRYVYNDALEYFDKNFL
  SQINLSIGKALEAIKLDGD
7 >AGE81522.1
8 MKKTILTTTAALTMMGTGMGINVDHIKPAE VKADTISFYDVPNNHWATKAITNLANRNIVVGYGNGQFGFGDNVTRG
  QVARMIIYNLKPADAGNFKNPFS DIKGHMFEKEILALAKVGIIKGYGEGKFGPDDILTREQMAQVL TNAFKFEGTKK
  TSFVDVDKNSWSYKAIGALEEKGV TIGTGGMYSPTSVVTREQYSQFLFNSINVIEKETKPEEK PNTGGEVKPEEKP
  NTGGEVKPEEK PNTGEETKPVNIPEWLETSLATNDFTFTQAWYDGSEAINKAASTNAQQIVKNINSKYGTNLKYSEV
  GAIVQLVDGAREQLWLAGMNVNDFRVTFRVSNAMI ELTKELVTLVNSDLNLDQEIQEIPSAPMKIKNVEKG DYKIR
  ISPAMADQM ITIIIEKK
```

```
1 $ cat convert.txt |head -n 6
```

```
1 AGE75591.1      HD73_0001
2 AGE75592.1      HD73_0002
3 AGE75593.1      HD73_0003
4 AGE75594.1      HD73_0004
5 AGE75595.1      HD73_0005
6 AGE75596.1      HD73_0006
```

运行命令：使用 `-r` 参数去除不能匹配的序列

```
1 $ fastx-utils replace -r convert.txt protein.faa | head -n 8
```

```
1 >HD73_4807
2 MKKIIIIISATTIVIGITSFAYFGSKTPLHNEAKAVESQKHNNHKKEEIPAFPKADHNAKKIDNDFSVVTNPKSNLVL
  INKHRKLPDGYIPEDLTRPNVPFISPKDKEKTLRKDAAEALENMFKAAKKEGLDLTAVSGYRSYKRQKSLHDTYVR
  RQGKAEANSVSAIPGTSEHQTGLAMDISSKSAKFQLEPIFGETAEGKWVAEHAHEFGFVIRYLEDKTDTTEYAYEPW
  HLRVVGNPYATYLYKHHLTLEEAMEDKK
3 >HD73_3980
4 MINHELVERINFLAKKAKAEGLTEEEQRRERQSLREQYLKGFRQNMLNELKGIKVVNEEGTDVPTKLKALKKQDNAK
  LN
5 >HD73_5496
6 MDKVISNEILQQFKDRMLRGDDDEDANLRRILFASNKDLTRVCGNYDLNIDEVFKELVFERSRYVYNDALEYFDKNFL
  SQINSLSIGKALEAIKLDGD
7 >HD73_6041
8 MKKTILTTTAALTMMGTGMGINVDHIKPAEVKADTISFYDVPNNHWATKAITNLANRNIVVGYGNGQFGFGDNVTRG
  QVARMYINYLPADAGNFKNPFSDIKGHMFEKEILALAKVGIKGYGEGKFGPDDILTREQMAQVLTNAFKFEGTKK
  TSFVDVDKNSWSYKAIGALEEKGVITGGNMYSPTSVVTREQYSQFLFNSINVIEKETKPEEKPNTGGEVKPEEKP
  NTGGEVKPEEKPNTGEETKPVNIPEWLETSLATNDFTFTQAWYDGSEAINKAASTNAQQIVKNINSKYGTNLKYSEV
  GAIVQLVDGAREQLWLAGMNVNDFRVTFRVSNAMIELTKELVTLVNSDLNLDQEIQEIPSPMKIKNVEKGDYKIR
  ISPAMADQMIIIIIEKK
```

本文材料为 **BASE (Biostack Applied bioinformatic SEies)** 课程 **Linux Command Line Tools for Life Scientists** 材料，版权归上海逻捷信息科技有限公司 所有。

Last Update: 2020-08-10 11:56 AM