

Useful shell commands

head/tail, cut, sort, uniq

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cat = shows the content of a file
less = shows the content of a file

Head and tail

cd pcfb/examples/

\$head ctd.txt
shows the first 10 lines

\$head -n 2 *.pdb
shows the first 2 lines

\$history | tail -n 15
shows the 15 most recent items in your command history

\$tail -n +2 Thalاس*.txt
shows from the second line to the end

\$head -n -1 Thalاس*.txt
shows from the second line to the 10th line

Cut

```
cd pcfb/examples/
```

```
$cut -f 1,3 Thal*.txt
```

returns columns 1 and 3 delimited by tabs

```
$cut -f 1-3 Thal*.txt
```

returns columns 1 to 3 delimited by tabs

```
$cut -c 16-20,30 Thal*.txt
```

returns characters 16 to 20 and 30 from each line

```
$grep ">" FPexamples.fta | cut -c 2-11
```

prints out the gene names

```
$head ctd.txt | cut -f 5,7 -d ","
```

returns columns 5 and 7. These are delimited by , in the original file and in the output.

Be careful when space is used between columns because there are sometimes two spaces instead of one.

Sort

```
$grep ">" FPexcerpt.fta | sort  
lines are sorted by alphabetical order
```

Options

- n**
sorts by numerical value rather than alphabetically
- f**
Make all lines uppercase before sorting
- r**
sorts in reverse order
- k 3**
sorts lines based on column 3 , with columns delimited by space or tab
\$head Thal.txt | sort -k 2
- t ","**
uses commas for delimiters
- u**
returns a unique representative of repeated items

The ASCII list

32	SP	64	@	96	`	128	Ç	160	á	192	Ł	224	Ó
33	!	65	A	97	a	129	ü	161	í	193	ł	225	ó
34	"	66	B	98	b	130	é	162	ó	194	ṽ	226	ô
35	#	67	C	99	c	131	â	163	ú	195	ṽ	227	ò
36	\$	68	D	100	d	132	ä	164	ñ	196	—	228	õ
37	%	69	E	101	e	133	à	165	Ñ	197	†	229	ö
38	&	70	F	102	f	134	å	166	ª	198	š	230	µ
39	'	71	G	103	g	135	ç	167	º	199	Š	231	þ
40	(	72	H	104	h	136	ê	168	¿	200	Ł	232	þ
41	)	73	I	105	i	137	ë	169	@	201	ŕ	233	ú
42	*	74	J	106	j	138	è	170	¬	202	Ł	234	û
43	+	75	K	107	k	139	ï	171	½	203	ŕ	235	ù
44	,	76	L	108	l	140	î	172	¼	204	ŕ	236	ý
45	-	77	M	109	m	141	ì	173	ì	205	=	237	ÿ
46	.	78	N	110	n	142	Ä	174	«	206	ŕ	238	ˉ
47	/	79	O	111	o	143	Å	175	»	207	×	239	˘
48	0	80	P	112	p	144	É	176	∴	208	ø	240	-
49	1	81	Q	113	q	145	æ	177	∴	209	Ð	241	±
50	2	82	R	114	r	146	Æ	178	■	210	Ê	242	_
51	3	83	S	115	s	147	ø	179	|	211	Ë	243	¾
52	4	84	T	116	t	148	ö	180	†	212	È	244	¶
53	5	85	U	117	u	149	ò	181	Á	213	ı	245	§
54	6	86	V	118	v	150	û	182	Á	214	í	246	÷
55	7	87	W	119	w	151	ù	183	À	215	î	247	˘
56	8	88	X	120	x	152	ÿ	184	©	216	ï	248	°
57	9	89	Y	121	y	153	Ö	185	¶	217	Ĵ	249	˘
58	:	90	Z	122	z	154	Ü	186	||	218	ŕ	250	˘
59	;	91	[	123	{	155	ø	187	¶	219	■	251	¹
60	<	92	\	124	|	156	£	188	¶	220	■	252	º
61	=	93	]	125	}	157	ø	189	¶	221	ı	253	²
62	>	94	^	126	~	158	×	190	¥	222	İ	254	■
63	?	95	_	127	DEL	159	f	191	ŕ	223	■	255	

Uniq

Removes identical lines that are in immediate succession and keeps a single line.

Options

-c

counts the number of occurrence of each unique line and write it before each unique line

```
$cut -c 12-21 ctd.txt | uniq -c
```

-f 4

ignores the first 4 fields (columns delimited by any number of spaces) in determining uniqueness

-i

ignore case when determining uniqueness