

Q11

a.

English:

```
$ grep -A 1 '<tuv xml:lang="EN">' uncorpora_plain_20090831.tmx | sed -  
e 's/<[^>]*>//g' | sed -e 's/--//g'|perl -pe 's/\s/\n/g;'|sort|uniq -  
c|sort -nr | head -20
```

267940 the
175497 of
136607 and
99545 to
66802 in
35910 on
32327 for
22534 that
21181 its
20349 with
20126 a
20006 United
19973 as
17251 by
16995 Nations
13933 at
12827 all
12061 international
11986 States
11173 their

Arabic:

```
$ grep -A 1 '<tuv xml:lang="AR">' uncorpora_plain_20090831.tmx | sed -  
e 's/<[^>]*>//g' | sed -e 's/--//g'|perl -pe 's/\s/\n/g;'|sort|uniq -  
c|sort -nr | head -20
```

في 92683
من 45238
على 38530
34817 -
إلى 34466
أن 24225
التي 18986
وإذ 18947
الأمم 17776
المتحدة 16764
عن 15046
الدول 11324
أو 10979
المؤرخ 10175
كانون 9476
مع 9413

جميع 9163
بما 8916
العام 8800
العامة 8770

Spanish:

```
$ grep -A 1 '<tuv xml:lang="ES">' uncorpora_plain_20090831.tmx | sed -  
e 's/<[^>]*>//g' | sed -e 's/--//g'|perl -pe 's/\s/\n/g;'|sort|uniq -  
c|sort -nr | head -20
```

313375 de
177307 la
131113 y
93456 en
86469 los
82328 el
77855 las
77003 a
69299 que
52778 del
37328 para
28287 con
22750 su
21639 por
21407 al
20266 sobre
18446 Naciones
15557 se
14062 Estados
13952 Unidas

Russian:

```
$ grep -A 1 '<tuv xml:lang="RU">' uncorpora_plain_20090831.tmx | sed -  
e 's/<[^>]*>//g' | sed -e 's/--//g'|perl -pe 's/\s/\n/g;'|sort|uniq -  
c|sort -nr | head -20
```

135693 и
100876 в
37886 по
37178 на
28031 с
19152 Объединенных
18190 Организации
18148 о
15609 для
14885 от
14180 что
13804 к
13361 Наций

11698 также
10911 года,
9245 декабря
9233 года
8520 их
8379 призывает
7816 или

b.

Top words

English	AR-EN	ES->EN	RU->EN
the	at	from	and
of	From	the	at
and	On	Y	by
to	-	in	on
in	to me	the	from
on	that	he	United
for	Which	the	The Organization
that	Taking	to	about
its	Nations	what	for
with	United Nations		of the from
a	About	for	what
United	Countries		with to
as	or	his	Of Nations
by	Of	by	also
Nations	Canon	to the	of the year,
at	With	on	December
all	all	Nations	of the year
international		Including	HE their
States	General	state	encourages
their	the public		United or

In these words, below words are the same in all four languages

AR: at, on, that, nations, United, of, with, all

ES: the, in, to, of, for, with, by, on, nations, state, united

RU: and, at, by, on, united, for, to, nations, of, or

For the bottom 20

For EN:

1 "22.1
1 "200"
1 "100
1 "10
1 "(v)
1 "(p)
1 "(o)

```

1 "(n)
1 "(m)
1 "(l)
1 "(k)
1 "(ix)
1 "(ii)"
1 "(i)".
1 "(e.g.,
1 "(d)";
1 "(d)"
1 "(conclusion
1 "(b)"
1 "

```

For AR:

```

1 "200"
1 "2
1 "11"
1 "100
1 "10".
1 "10

```

على)" 1

عقد)" 1

"(ب)" 1

(ن)" 1

(م)" 1

(ل)" 1

(ك)" 1

(ع)" 1

(س)" 1

```

1 "(3)
1 "()",
1 "'9'
1 "'6'
1 "'5'

```

Which means AR->EN

```

1 "200"
1 "2
1 "11"
1 "100
1 "10".
1 "
1 "(on
1 "contract
1 "(b)"
1 "(n)
1 "(m)
1 "(l)
1 "(k)
1 "(p)
1S)

```

1 "(3)
(1)
(I)
1 "(vi)
15'

For RU

1 "публичным
1 "торговля
1 "ребенок"
1 "пытками
1 "выемка"
1 "судно"
1 "realize".
1 "progress
1 "peacekeeping
1 "peace
1 "(i)"
1 "a".
1 "What
1 "Visa
1 "UN
1 "The
1 "Reports
1 "Least
1 "Info
1 "Africa

Which means RU->EN

1 "in public
1 "trade
1 "child"
1 "by torture
1 "notch"
1 "vessel"
1 "realize".
1 "progress
1 "peacekeeping
1 "peace
1 "(i)"
1 "a".
1 "What
1 "Visa
1 "UN
1 "The
1 "Reports
1 "Least
1 "Info
1 "Africa

For ES:

```

1 "8
1 "600".
1 "6
1 "4.5
1 "3%"
1 "3
1 "27C.5.
1 "23.
1 "22.1
1 "2000-2001:
1 "200"
1 "2%".
1 "2
1 "100%
1 "10
1 ", incluso
1 ", incluida
1 ", 40
1 "(por
1 "(concertación
Which means es->EN

```

```

1 "8
1 "600".
1 "6
1 "4.5
1 "3%"
1 "3
1 "27C.5.
1 "23.
1 "22.1
1 "2000-2001:
1 "200"
1 "2%".
1 "2
1 "100%
1 "10
1 ", even
1 "included
1 ", 40
1 "(for
1 "(concertation

```

Conclusion: for the bottom 20, different language has quite different results. For ES,AR, most of the results are numbers. For RU, most are words. For EN, most are single letter.