

MapReduce

Classroom example

This is the file to create a map reduce classroom example. The setup is as follows

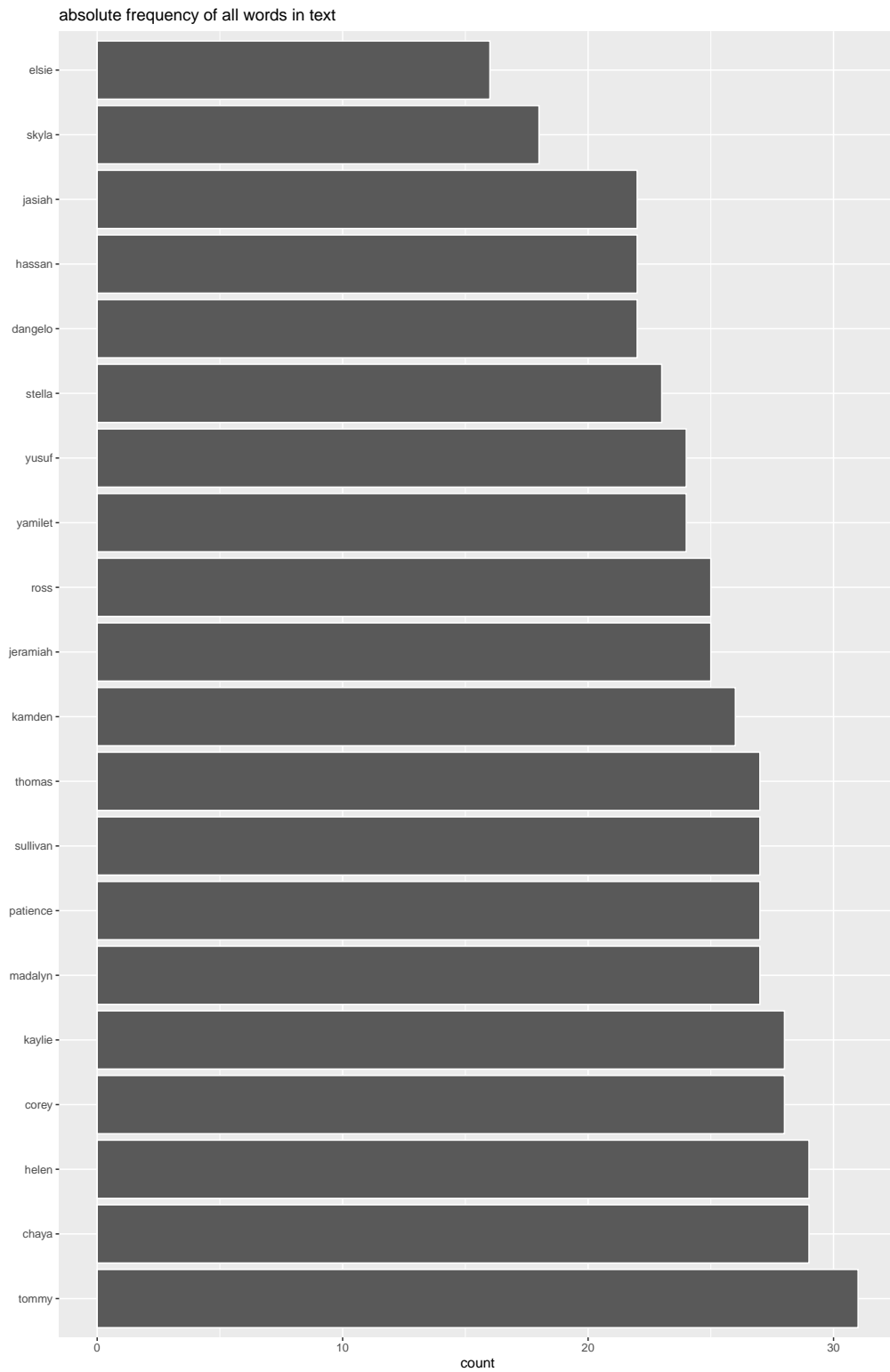
1. print this file
2. give the raw file to 1-4 students, they shall count the words. Measure the time. This is sequential processing.
3. give the chunked file to the respective number of students. There are $n = 2, 4, 5, 10$ groups available. The number of students is the chunk server.
4. one student acts as the “reduce” server, collecting all the counts.
5. write the counts on the whiteboard including the times
6. which number of groups is the most efficient and which produces considerable overhead?

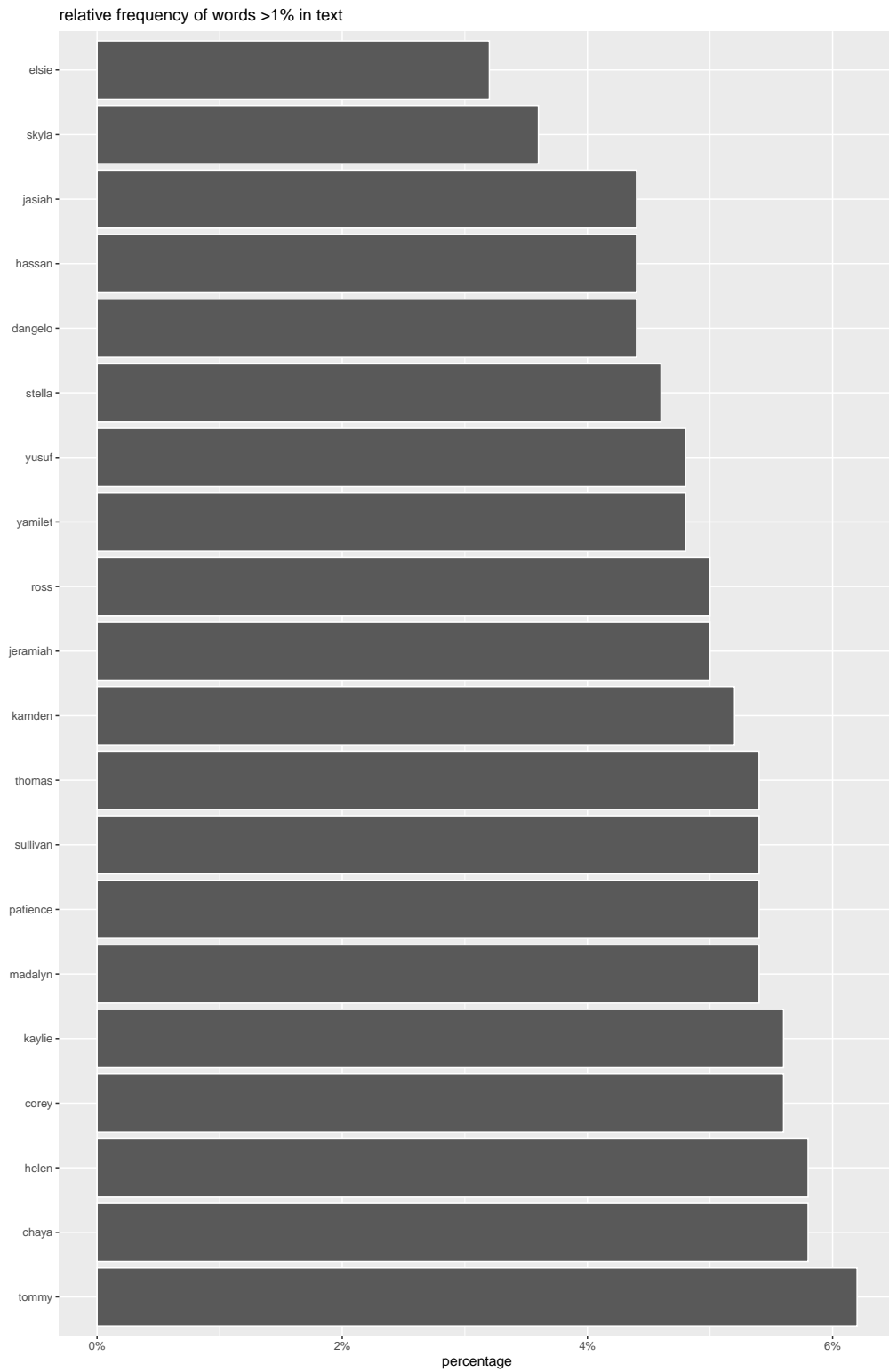
some summary statistics on the raw data

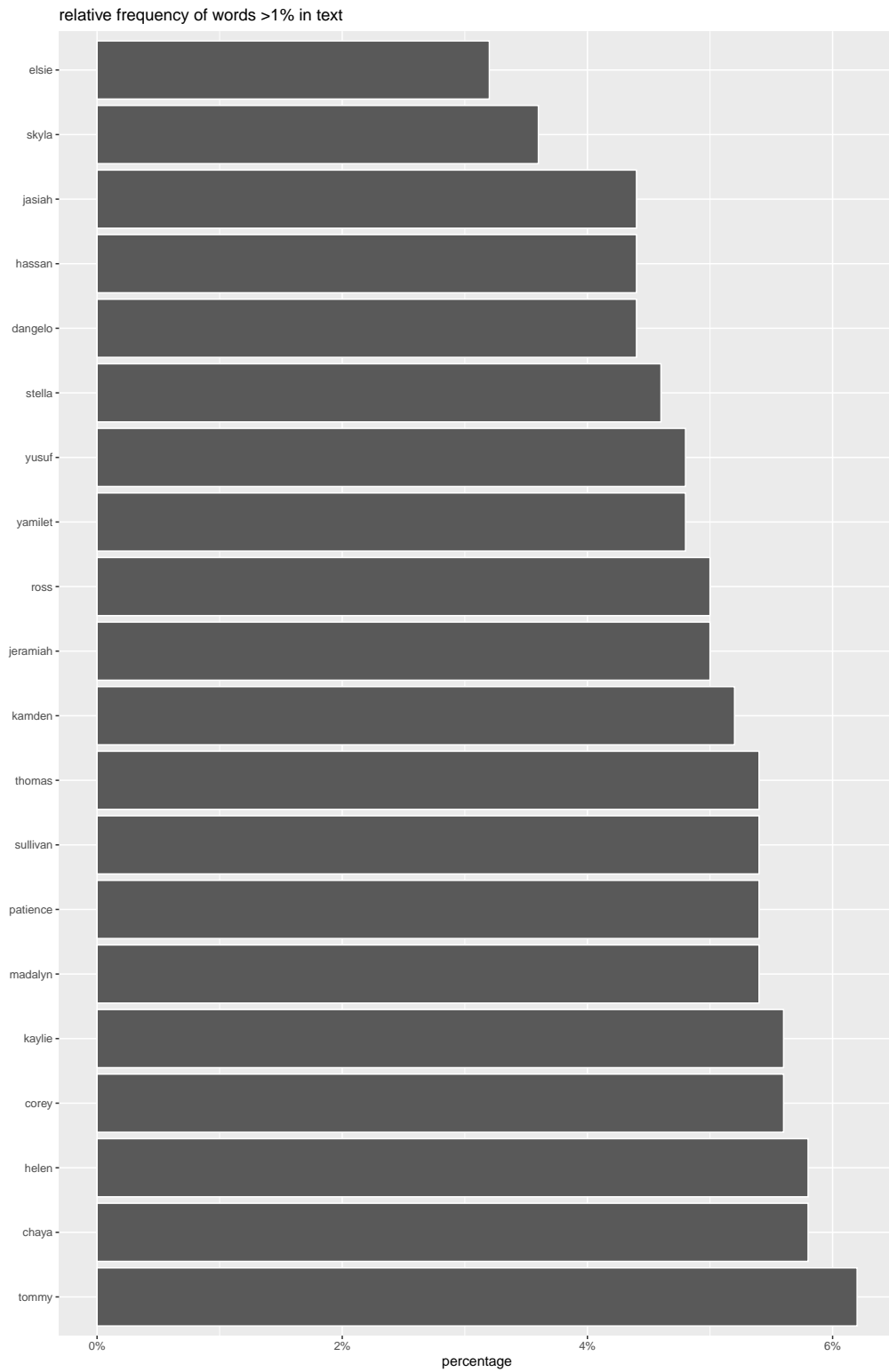
In total there are 500 words available.

words	Freq	percentage	percentage_round
tommy	31	6.20%	6.20%
chaya	29	5.80%	5.80%
helen	29	5.80%	5.80%
corey	28	5.60%	5.60%
kaylie	28	5.60%	5.60%
madalyn	27	5.40%	5.40%
patience	27	5.40%	5.40%
sullivan	27	5.40%	5.40%
thomas	27	5.40%	5.40%
kamden	26	5.20%	5.20%
jeramiah	25	5.00%	5.00%
ross	25	5.00%	5.00%

yamilet	24	4.80%	4.80%
yusuf	24	4.80%	4.80%
stella	23	4.60%	4.60%
dangelo	22	4.40%	4.40%
hassan	22	4.40%	4.40%
jasiah	22	4.40%	4.40%
skyla	18	3.60%	3.60%
elsie	16	3.20%	3.20%







The Raw data 01

Helen, Dangelo, Jeramiah, Thomas, Thomas, Jasiah, Madalyn, Skyla, Ross , Sullivan, Kaylie, Madalyn, Corey, Hassan, Hassan, Elsie, Corey, Corey, Madalyn, Skyla, Elsie, Kaylie, Skyla, Tommy, Jasiah, Tommy, Tommy, Madalyn, Yamilet, Yamilet, Thomas, Patience, Corey, Dangelo, Jeramiah, Chaya, Chaya, Hassan, Yusuf, Helen, Sullivan, Thomas, Corey, Madalyn, Helen, Helen, Hassan, Corey, Jeramiah, Thomas, Kamden, Ross , Yamilet, Patience, Yusuf, Patience, Skyla, Yusuf, Tommy, Patience, Kamden, Kamden, Corey, Patience, Kamden, Kaylie, Madalyn, Dangelo, Corey, Jasiah, Stella, Patience, Chaya, Jeramiah, Hassan, Yamilet, Dangelo, Chaya, Madalyn, Ross , Kamden, Tommy, Elsie, Patience, Sullivan, Stella, Yamilet, Kamden, Helen, Elsie, Thomas, Jeramiah, Kamden, Kaylie, Kaylie, Thomas, Stella, Dangelo, Dangelo, Helen, Tommy, Helen, Thomas, Yusuf, Thomas, Sullivan, Elsie, Chaya, Kamden, Ross , Stella, Madalyn, Dangelo, Stella, Ross , Kaylie, Kamden, Kamden, Jeramiah, Patience, Corey, Sullivan, Hassan, Kaylie, Yusuf, Kamden, Jasiah, Thomas, Elsie, Kaylie, Ross , Thomas, Patience, Dangelo, Jeramiah, Jasiah, Helen, Jeramiah, Corey, Jeramiah, Yamilet, Dangelo, Thomas, Stella, Sullivan, Dangelo, Helen, Stella, Kamden, Ross , Jasiah, Madalyn, Hassan, Kaylie, Stella, Yusuf, Tommy, Madalyn, Skyla, Hassan, Skyla, Hassan, Tommy, Kaylie, Elsie, Stella, Sullivan, Elsie, Dangelo, Corey, Corey, Tommy, Jeramiah, Tommy, Chaya, Patience, Yusuf, Jeramiah, Chaya, Corey, Elsie, Patience, Hassan, Hassan, Sullivan, Kaylie, Helen, Jasiah, Tommy, Chaya, Chaya, Jeramiah, Hassan, Yusuf, Kaylie, Stella, Tommy, Yusuf, Helen, Chaya, Patience, Madalyn, Sullivan, Hassan, Yusuf, Jeramiah, Ross , Sullivan, Kaylie, Jeramiah, Stella, Patience, Elsie, Stella, Chaya, Sullivan, Yusuf, Tommy, Madalyn, Ross , Helen, Patience, Kaylie, Patience, Patience, Elsie, Helen, Elsie, Sullivan, Helen, Dangelo, Helen, Tommy, Jasiah, Kamden, Jeramiah, Hassan, Sullivan, Thomas, Chaya, Kamden, Kaylie, Jeramiah, Hassan, Madalyn, Tommy, Elsie, Corey, Tommy, Kamden, Kaylie, Kamden, Dangelo, Yusuf, Sullivan, Patience, Ross , Stella, Hassan, Stella, Sullivan, Sullivan, Ross , Thomas, Madalyn, Yusuf, Stella, Yamilet, Chaya, Skyla, Madalyn, Madalyn, Jeramiah, Kamden, Corey, Chaya, Skyla, Yamilet, Chaya, Ross , Corey, Yusuf, Corey, Yamilet, Sullivan, Stella, Tommy, Patience, Kamden, Ross , Ross , Stella, Chaya, Corey, Kaylie, Ross , Madalyn, Yamilet, Helen, Thomas, Corey, Yusuf, Jeramiah, Kaylie, Patience, Patience, Jeramiah, Chaya, Kamden, Chaya, Jasiah, Ross , Jasiah, Sullivan, Yamilet, Hassan, Chaya, Thomas, Elsie, Skyla, Kamden, Stella, Jasiah, Ross , Helen, Sullivan, Kaylie, Yamilet, Yamilet, Jeramiah, Tommy, Yamilet, Patience, Chaya, Kaylie, Jasiah, Jasiah, Skyla, Thomas, Patience, Helen, Kamden, Hassan, Kaylie, Thomas, Corey, Jeramiah, Ross , Jasiah, Thomas, Yamilet, Tommy, Tommy, Chaya, Ross , Madalyn, Yusuf, Corey, Corey, Ross , Chaya, Yamilet, Sullivan, Patience, Tommy, Thomas, Kamden, Chaya, Tommy, Kaylie, Sullivan, Madalyn, Corey, Jeramiah, Sullivan, Dangelo, Helen, Stella, Sullivan, Yusuf, Stella, Thomas, Ross , Jeramiah, Kaylie, Kaylie, Chaya, Tommy, Helen, Hassan, Madalyn, Patience, Hassan, Sullivan, Jasiah, Jasiah, Kaylie, Chaya, Skyla, Jeramiah, Yusuf, Helen, Thomas, Helen, Yamilet, Ross , Dangelo, Helen, Yamilet, Thomas, Madalyn, Chaya, Corey, Skyla, Thomas, Skyla, Dangelo, Helen, Kamden, Corey, Yamilet, Hassan, Yamilet, Yamilet, Jasiah, Ross , Tommy, Yusuf, Dangelo, Madalyn, Elsie, Helen, Dangelo, Sullivan, Elsie, Kaylie, Tommy, Helen, Dangelo, Tommy,

Kaylie, Chaya, Dangelo, Jeramiah, Jasiah, Chaya, Kamden, Patience, Yusuf, Ross , Tommy, Patience, Madalyn, Madalyn, Madalyn, Thomas, Jasiah, Tommy, Kamden, Sullivan, Helen, Sullivan, Hassan, Madalyn, Dangelo, Kaylie, Stella, Skyla, Corey, Madalyn, Yusuf, Stella, Yusuf, Yamilet, Yusuf, Thomas, Jasiah, Helen, Thomas, Tommy, Kamden, Tommy, Yusuf, Ross , Skyla, Stella, Skyla, Corey, Jasiah, Yamilet, Jasiah, Yamilet, Dangelo, Chaya, Helen, Skyla, Skyla, Tommy, Patience, Corey

The Raw data 02

Helen, Dangelo, Jeramiah, Thomas, Thomas, Jasiah, Madalyn, Skyla, Ross , Sullivan, Kaylie, Madalyn, Corey, Hassan, Hassan, Elsie, Corey, Corey, Madalyn, Skyla, Elsie, Kaylie, Skyla, Tommy, Jasiah, Tommy, Tommy, Madalyn, Yamilet, Yamilet, Thomas, Patience, Corey, Dangelo, Jeramiah, Chaya, Chaya, Hassan, Yusuf, Helen, Sullivan, Thomas, Corey, Madalyn, Helen, Helen, Hassan, Corey, Jeramiah, Thomas, Kamden, Ross , Yamilet, Patience, Yusuf, Patience, Skyla, Yusuf, Tommy, Patience, Kamden, Kamden, Corey, Patience, Kamden, Kaylie, Madalyn, Dangelo, Corey, Jasiah, Stella, Patience, Chaya, Jeramiah, Hassan, Yamilet, Dangelo, Chaya, Madalyn, Ross , Kamden, Tommy, Elsie, Patience, Sullivan, Stella, Yamilet, Kamden, Helen, Elsie, Thomas, Jeramiah, Kamden, Kaylie, Kaylie, Thomas, Stella, Dangelo, Dangelo, Helen, Tommy, Helen, Thomas, Yusuf, Thomas, Sullivan, Elsie, Chaya, Kamden, Ross , Stella, Madalyn, Dangelo, Stella, Ross , Kaylie, Kamden, Kamden, Jeramiah, Patience, Corey, Sullivan, Hassan, Kaylie, Yusuf, Kamden, Jasiah, Thomas, Elsie, Kaylie, Ross , Thomas, Patience, Dangelo, Jeramiah, Jasiah, Helen, Jeramiah, Corey, Jeramiah, Yamilet, Dangelo, Thomas, Stella, Sullivan, Dangelo, Helen, Stella, Kamden, Ross , Jasiah, Madalyn, Hassan, Kaylie, Stella, Yusuf, Tommy, Madalyn, Skyla, Hassan, Skyla, Hassan, Tommy, Kaylie, Elsie, Stella, Sullivan, Elsie, Dangelo, Corey, Corey, Tommy, Jeramiah, Tommy, Chaya, Patience, Yusuf, Jeramiah, Chaya, Corey, Elsie, Patience, Hassan, Hassan, Sullivan, Kaylie, Helen, Jasiah, Tommy, Chaya, Chaya, Jeramiah, Hassan, Yusuf, Kaylie, Stella, Tommy, Yusuf, Helen, Chaya, Patience, Madalyn, Sullivan, Hassan, Yusuf, Jeramiah, Ross , Sullivan, Kaylie, Jeramiah, Stella, Patience, Elsie, Stella, Chaya, Sullivan, Yusuf, Tommy, Madalyn, Ross , Helen, Patience, Kaylie, Patience, Patience, Elsie, Helen, Elsie, Sullivan, Helen, Dangelo, Helen, Tommy, Jasiah, Kamden, Jeramiah, Hassan, Sullivan, Thomas, Chaya, Kamden, Kaylie, Jeramiah, Hassan, Madalyn, Tommy, Elsie, Corey, Tommy, Kamden, Kaylie, Kamden, Dangelo, Yusuf, Sullivan, Patience, Ross , Stella, Hassan, Stella, Sullivan, Sullivan, Ross , Thomas, Madalyn, Yusuf, Stella, Yamilet, Chaya, Skyla, Madalyn, Madalyn, Jeramiah, Kamden, Corey, Chaya, Skyla, Yamilet, Chaya, Ross , Corey, Yusuf, Corey, Yamilet, Sullivan, Stella, Tommy, Patience, Kamden, Ross , Ross , Stella, Chaya, Corey, Kaylie, Ross , Madalyn, Yamilet, Helen, Thomas, Corey, Yusuf, Jeramiah, Kaylie, Patience, Patience, Jeramiah, Chaya, Kamden, Chaya, Jasiah, Ross , Jasiah, Sullivan, Yamilet, Hassan, Chaya, Thomas, Elsie, Skyla, Kamden, Stella, Jasiah, Ross , Helen, Sullivan, Kaylie, Yamilet, Yamilet, Jeramiah, Tommy, Yamilet, Patience, Chaya, Kaylie, Jasiah, Jasiah, Skyla, Thomas, Patience, Helen, Kamden, Hassan, Kaylie, Thomas, Corey, Jeramiah, Ross , Jasiah, Thomas, Yamilet, Tommy, Tommy, Chaya, Ross , Madalyn, Yusuf, Corey, Corey, Ross , Chaya, Yamilet, Sullivan, Patience, Tommy, Thomas, Kamden, Chaya, Tommy, Kaylie, Sullivan, Madalyn, Corey, Jeramiah, Sullivan, Dangelo, Helen, Stella, Sullivan, Yusuf, Stella, Thomas, Ross , Jeramiah, Kaylie, Kaylie, Chaya, Tommy, Helen, Hassan, Madalyn, Patience, Hassan, Sullivan, Jasiah, Jasiah, Kaylie, Chaya, Skyla, Jeramiah, Yusuf, Helen, Thomas, Helen, Yamilet, Ross , Dangelo, Helen, Yamilet, Thomas, Madalyn, Chaya, Corey, Skyla, Thomas, Skyla, Dangelo, Helen, Kamden, Corey, Yamilet, Hassan, Yamilet, Yamilet, Jasiah, Ross , Tommy, Yusuf, Dangelo, Madalyn, Elsie, Helen, Dangelo, Sullivan, Elsie, Kaylie, Tommy, Helen, Dangelo, Tommy,

Kaylie, Chaya, Dangelo, Jeramiah, Jasiah, Chaya, Kamden, Patience, Yusuf, Ross , Tommy, Patience, Madalyn, Madalyn, Madalyn, Thomas, Jasiah, Tommy, Kamden, Sullivan, Helen, Sullivan, Hassan, Madalyn, Dangelo, Kaylie, Stella, Skyla, Corey, Madalyn, Yusuf, Stella, Yusuf, Yamilet, Yusuf, Thomas, Jasiah, Helen, Thomas, Tommy, Kamden, Tommy, Yusuf, Ross , Skyla, Stella, Skyla, Corey, Jasiah, Yamilet, Jasiah, Yamilet, Dangelo, Chaya, Helen, Skyla, Skyla, Tommy, Patience, Corey

The Raw data 03

Helen, Dangelo, Jeramiah, Thomas, Thomas, Jasiah, Madalyn, Skyla, Ross , Sullivan, Kaylie, Madalyn, Corey, Hassan, Hassan, Elsie, Corey, Corey, Madalyn, Skyla, Elsie, Kaylie, Skyla, Tommy, Jasiah, Tommy, Tommy, Madalyn, Yamilet, Yamilet, Thomas, Patience, Corey, Dangelo, Jeramiah, Chaya, Chaya, Hassan, Yusuf, Helen, Sullivan, Thomas, Corey, Madalyn, Helen, Helen, Hassan, Corey, Jeramiah, Thomas, Kamden, Ross , Yamilet, Patience, Yusuf, Patience, Skyla, Yusuf, Tommy, Patience, Kamden, Kamden, Corey, Patience, Kamden, Kaylie, Madalyn, Dangelo, Corey, Jasiah, Stella, Patience, Chaya, Jeramiah, Hassan, Yamilet, Dangelo, Chaya, Madalyn, Ross , Kamden, Tommy, Elsie, Patience, Sullivan, Stella, Yamilet, Kamden, Helen, Elsie, Thomas, Jeramiah, Kamden, Kaylie, Kaylie, Thomas, Stella, Dangelo, Dangelo, Helen, Tommy, Helen, Thomas, Yusuf, Thomas, Sullivan, Elsie, Chaya, Kamden, Ross , Stella, Madalyn, Dangelo, Stella, Ross , Kaylie, Kamden, Kamden, Jeramiah, Patience, Corey, Sullivan, Hassan, Kaylie, Yusuf, Kamden, Jasiah, Thomas, Elsie, Kaylie, Ross , Thomas, Patience, Dangelo, Jeramiah, Jasiah, Helen, Jeramiah, Corey, Jeramiah, Yamilet, Dangelo, Thomas, Stella, Sullivan, Dangelo, Helen, Stella, Kamden, Ross , Jasiah, Madalyn, Hassan, Kaylie, Stella, Yusuf, Tommy, Madalyn, Skyla, Hassan, Skyla, Hassan, Tommy, Kaylie, Elsie, Stella, Sullivan, Elsie, Dangelo, Corey, Corey, Tommy, Jeramiah, Tommy, Chaya, Patience, Yusuf, Jeramiah, Chaya, Corey, Elsie, Patience, Hassan, Hassan, Sullivan, Kaylie, Helen, Jasiah, Tommy, Chaya, Chaya, Jeramiah, Hassan, Yusuf, Kaylie, Stella, Tommy, Yusuf, Helen, Chaya, Patience, Madalyn, Sullivan, Hassan, Yusuf, Jeramiah, Ross , Sullivan, Kaylie, Jeramiah, Stella, Patience, Elsie, Stella, Chaya, Sullivan, Yusuf, Tommy, Madalyn, Ross , Helen, Patience, Kaylie, Patience, Patience, Elsie, Helen, Elsie, Sullivan, Helen, Dangelo, Helen, Tommy, Jasiah, Kamden, Jeramiah, Hassan, Sullivan, Thomas, Chaya, Kamden, Kaylie, Jeramiah, Hassan, Madalyn, Tommy, Elsie, Corey, Tommy, Kamden, Kaylie, Kamden, Dangelo, Yusuf, Sullivan, Patience, Ross , Stella, Hassan, Stella, Sullivan, Sullivan, Ross , Thomas, Madalyn, Yusuf, Stella, Yamilet, Chaya, Skyla, Madalyn, Madalyn, Jeramiah, Kamden, Corey, Chaya, Skyla, Yamilet, Chaya, Ross , Corey, Yusuf, Corey, Yamilet, Sullivan, Stella, Tommy, Patience, Kamden, Ross , Ross , Stella, Chaya, Corey, Kaylie, Ross , Madalyn, Yamilet, Helen, Thomas, Corey, Yusuf, Jeramiah, Kaylie, Patience, Patience, Jeramiah, Chaya, Kamden, Chaya, Jasiah, Ross , Jasiah, Sullivan, Yamilet, Hassan, Chaya, Thomas, Elsie, Skyla, Kamden, Stella, Jasiah, Ross , Helen, Sullivan, Kaylie, Yamilet, Yamilet, Jeramiah, Tommy, Yamilet, Patience, Chaya, Kaylie, Jasiah, Jasiah, Skyla, Thomas, Patience, Helen, Kamden, Hassan, Kaylie, Thomas, Corey, Jeramiah, Ross , Jasiah, Thomas, Yamilet, Tommy, Tommy, Chaya, Ross , Madalyn, Yusuf, Corey, Corey, Ross , Chaya, Yamilet, Sullivan, Patience, Tommy, Thomas, Kamden, Chaya, Tommy, Kaylie, Sullivan, Madalyn, Corey, Jeramiah, Sullivan, Dangelo, Helen, Stella, Sullivan, Yusuf, Stella, Thomas, Ross , Jeramiah, Kaylie, Kaylie, Chaya, Tommy, Helen, Hassan, Madalyn, Patience, Hassan, Sullivan, Jasiah, Jasiah, Kaylie, Chaya, Skyla, Jeramiah, Yusuf, Helen, Thomas, Helen, Yamilet, Ross , Dangelo, Helen, Yamilet, Thomas, Madalyn, Chaya, Corey, Skyla, Thomas, Skyla, Dangelo, Helen, Kamden, Corey, Yamilet, Hassan, Yamilet, Yamilet, Jasiah, Ross , Tommy, Yusuf, Dangelo, Madalyn, Elsie, Helen, Dangelo, Sullivan, Elsie, Kaylie, Tommy, Helen, Dangelo, Tommy,

Kaylie, Chaya, Dangelo, Jeramiah, Jasiah, Chaya, Kamden, Patience, Yusuf, Ross , Tommy, Patience, Madalyn, Madalyn, Madalyn, Thomas, Jasiah, Tommy, Kamden, Sullivan, Helen, Sullivan, Hassan, Madalyn, Dangelo, Kaylie, Stella, Skyla, Corey, Madalyn, Yusuf, Stella, Yusuf, Yamilet, Yusuf, Thomas, Jasiah, Helen, Thomas, Tommy, Kamden, Tommy, Yusuf, Ross , Skyla, Stella, Skyla, Corey, Jasiah, Yamilet, Jasiah, Yamilet, Dangelo, Chaya, Helen, Skyla, Skyla, Tommy, Patience, Corey

The Raw data 04

Helen, Dangelo, Jeramiah, Thomas, Thomas, Jasiah, Madalyn, Skyla, Ross , Sullivan, Kaylie, Madalyn, Corey, Hassan, Hassan, Elsie, Corey, Corey, Madalyn, Skyla, Elsie, Kaylie, Skyla, Tommy, Jasiah, Tommy, Tommy, Madalyn, Yamilet, Yamilet, Thomas, Patience, Corey, Dangelo, Jeramiah, Chaya, Chaya, Hassan, Yusuf, Helen, Sullivan, Thomas, Corey, Madalyn, Helen, Helen, Hassan, Corey, Jeramiah, Thomas, Kamden, Ross , Yamilet, Patience, Yusuf, Patience, Skyla, Yusuf, Tommy, Patience, Kamden, Kamden, Corey, Patience, Kamden, Kaylie, Madalyn, Dangelo, Corey, Jasiah, Stella, Patience, Chaya, Jeramiah, Hassan, Yamilet, Dangelo, Chaya, Madalyn, Ross , Kamden, Tommy, Elsie, Patience, Sullivan, Stella, Yamilet, Kamden, Helen, Elsie, Thomas, Jeramiah, Kamden, Kaylie, Kaylie, Thomas, Stella, Dangelo, Dangelo, Helen, Tommy, Helen, Thomas, Yusuf, Thomas, Sullivan, Elsie, Chaya, Kamden, Ross , Stella, Madalyn, Dangelo, Stella, Ross , Kaylie, Kamden, Kamden, Jeramiah, Patience, Corey, Sullivan, Hassan, Kaylie, Yusuf, Kamden, Jasiah, Thomas, Elsie, Kaylie, Ross , Thomas, Patience, Dangelo, Jeramiah, Jasiah, Helen, Jeramiah, Corey, Jeramiah, Yamilet, Dangelo, Thomas, Stella, Sullivan, Dangelo, Helen, Stella, Kamden, Ross , Jasiah, Madalyn, Hassan, Kaylie, Stella, Yusuf, Tommy, Madalyn, Skyla, Hassan, Skyla, Hassan, Tommy, Kaylie, Elsie, Stella, Sullivan, Elsie, Dangelo, Corey, Corey, Tommy, Jeramiah, Tommy, Chaya, Patience, Yusuf, Jeramiah, Chaya, Corey, Elsie, Patience, Hassan, Hassan, Sullivan, Kaylie, Helen, Jasiah, Tommy, Chaya, Chaya, Jeramiah, Hassan, Yusuf, Kaylie, Stella, Tommy, Yusuf, Helen, Chaya, Patience, Madalyn, Sullivan, Hassan, Yusuf, Jeramiah, Ross , Sullivan, Kaylie, Jeramiah, Stella, Patience, Elsie, Stella, Chaya, Sullivan, Yusuf, Tommy, Madalyn, Ross , Helen, Patience, Kaylie, Patience, Patience, Elsie, Helen, Elsie, Sullivan, Helen, Dangelo, Helen, Tommy, Jasiah, Kamden, Jeramiah, Hassan, Sullivan, Thomas, Chaya, Kamden, Kaylie, Jeramiah, Hassan, Madalyn, Tommy, Elsie, Corey, Tommy, Kamden, Kaylie, Kamden, Dangelo, Yusuf, Sullivan, Patience, Ross , Stella, Hassan, Stella, Sullivan, Sullivan, Ross , Thomas, Madalyn, Yusuf, Stella, Yamilet, Chaya, Skyla, Madalyn, Madalyn, Jeramiah, Kamden, Corey, Chaya, Skyla, Yamilet, Chaya, Ross , Corey, Yusuf, Corey, Yamilet, Sullivan, Stella, Tommy, Patience, Kamden, Ross , Ross , Stella, Chaya, Corey, Kaylie, Ross , Madalyn, Yamilet, Helen, Thomas, Corey, Yusuf, Jeramiah, Kaylie, Patience, Patience, Jeramiah, Chaya, Kamden, Chaya, Jasiah, Ross , Jasiah, Sullivan, Yamilet, Hassan, Chaya, Thomas, Elsie, Skyla, Kamden, Stella, Jasiah, Ross , Helen, Sullivan, Kaylie, Yamilet, Yamilet, Jeramiah, Tommy, Yamilet, Patience, Chaya, Kaylie, Jasiah, Jasiah, Skyla, Thomas, Patience, Helen, Kamden, Hassan, Kaylie, Thomas, Corey, Jeramiah, Ross , Jasiah, Thomas, Yamilet, Tommy, Tommy, Chaya, Ross , Madalyn, Yusuf, Corey, Corey, Ross , Chaya, Yamilet, Sullivan, Patience, Tommy, Thomas, Kamden, Chaya, Tommy, Kaylie, Sullivan, Madalyn, Corey, Jeramiah, Sullivan, Dangelo, Helen, Stella, Sullivan, Yusuf, Stella, Thomas, Ross , Jeramiah, Kaylie, Kaylie, Chaya, Tommy, Helen, Hassan, Madalyn, Patience, Hassan, Sullivan, Jasiah, Jasiah, Kaylie, Chaya, Skyla, Jeramiah, Yusuf, Helen, Thomas, Helen, Yamilet, Ross , Dangelo, Helen, Yamilet, Thomas, Madalyn, Chaya, Corey, Skyla, Thomas, Skyla, Dangelo, Helen, Kamden, Corey, Yamilet, Hassan, Yamilet, Yamilet, Jasiah, Ross , Tommy, Yusuf, Dangelo, Madalyn, Elsie, Helen, Dangelo, Sullivan, Elsie, Kaylie, Tommy, Helen, Dangelo, Tommy,

Kaylie, Chaya, Dangelo, Jeramiah, Jasiah, Chaya, Kamden, Patience, Yusuf, Ross , Tommy, Patience, Madalyn, Madalyn, Madalyn, Thomas, Jasiah, Tommy, Kamden, Sullivan, Helen, Sullivan, Hassan, Madalyn, Dangelo, Kaylie, Stella, Skyla, Corey, Madalyn, Yusuf, Stella, Yusuf, Yamilet, Yusuf, Thomas, Jasiah, Helen, Thomas, Tommy, Kamden, Tommy, Yusuf, Ross , Skyla, Stella, Skyla, Corey, Jasiah, Yamilet, Jasiah, Yamilet, Dangelo, Chaya, Helen, Skyla, Skyla, Tommy, Patience, Corey

Two Groups

Part 1 of 2 (250 words)

helen jeramiah thomas madalyn ross kaylie corey hassan corey madalyn elsie skyla jasiah
tommy yamilet thomas corey jeramiah chaya yusuf sullivan corey helen hassan jeramiah kam-
den yamilet yusuf skyla tommy kamden corey kamden madalyn corey stella chaya hassan dan-
gelo madalyn kamden elsie sullivan yamilet helen thomas kamden kaylie stella dangelo tommy
thomas thomas elsie kamden stella dangelo ross kamden jeramiah corey hassan yusuf jasiah
elsie ross patience jeramiah helen corey yamilet thomas sullivan helen kamden jasiah hassan
stella tommy skyla skyla tommy elsie sullivan dangelo corey jeramiah chaya yusuf chaya elsie
hassan sullivan helen tommy chaya hassan kaylie tommy helen patience sullivan yusuf ross
kaylie stella elsie chaya yusuf madalyn helen kaylie patience helen sullivan dangelo tommy
kamden hassan thomas kamden jeramiah madalyn elsie tommy kaylie dangelo sullivan ross
hassan sullivan ross madalyn stella chaya madalyn jeramiah corey skyla chaya corey corey
sullivan tommy kamden ross chaya kaylie madalyn helen corey jeramiah patience jeramiah
kamden jasiah jasiah yamilet chaya elsie kamden jasiah helen kaylie yamilet tommy patience
kaylie jasiah thomas helen hassan thomas jeramiah jasiah yamilet tommy ross yusuf corey
chaya sullivan tommy kamden tommy sullivan corey sullivan helen sullivan stella ross kaylie
chaya helen madalyn hassan jasiah kaylie skyla yusuf thomas yamilet dangelo yamilet mada-
lyn corey thomas dangelo kamden yamilet yamilet jasiah tommy dangelo elsie dangelo elsie
tommy dangelo kaylie dangelo jasiah kamden yusuf tommy madalyn madalyn jasiah kamden
helen hassan dangelo stella corey yusuf yusuf yusuf jasiah thomas kamden yusuf skyla skyla
jasiah jasiah dangelo helen skyla patience

Part 2 of 2 (250 words)

dangelo thomas jasiah skyla sullivan madalyn hassan elsie corey skyla kaylie tommy tommy madalyn yamilet patience dangelo chaya hassan helen thomas madalyn helen corey thomas ross patience patience yusuf patience kamden patience kaylie dangelo jasiah patience jeramiah yamilet chaya ross tommy patience stella kamden elsie jeramiah kaylie thomas dangelo helen helen yusuf sullivan chaya ross madalyn stella kaylie kamden patience sullivan kaylie kamden thomas kaylie thomas dangelo jasiah jeramiah jeramiah dangelo stella dangelo stella ross madalyn kaylie yusuf madalyn hassan hassan kaylie stella elsie corey tommy tommy patience jeramiah corey patience hassan kaylie jasiah chaya jeramiah yusuf stella yusuf chaya madalyn hassan jeramiah sullivan jeramiah patience stella sullivan tommy ross patience patience elsie elsie helen helen jasiah jeramiah sullivan chaya kaylie hassan tommy corey kamden kamden yusuf patience stella stella sullivan thomas yusuf yamilet skyla madalyn kamden chaya yamilet ross yusuf yamilet stella patience ross stella corey ross yamilet thomas yusuf kaylie patience chaya chaya ross sullivan hassan thomas skyla stella ross sullivan yamilet jeramiah yamilet chaya jasiah skyla patience kamden kaylie corey ross thomas tommy chaya madalyn corey ross yamilet patience thomas chaya kaylie madalyn jeramiah dangelo stella yusuf thomas jeramiah kaylie tommy hassan patience sullivan jasiah chaya jeramiah helen helen ross helen thomas chaya skyla skyla helen corey hassan yamilet ross yusuf madalyn helen sullivan kaylie helen tommy chaya jeramiah chaya patience ross patience madalyn thomas tommy sullivan sullivan madalyn kaylie skyla madalyn stella yamilet thomas helen tommy tommy ross stella corey yamilet yamilet chaya skyla tommy corey

Four Groups

Part 1 of 4 (125 words)

helen thomas ross corey corey elsie jasiah yamilet corey chaya sullivan helen jeramiah yamilet skyla kamden kamden corey chaya dangelo kamden sullivan helen kamden stella tommy thomas kamden dangelo kamden corey yusuf elsie patience helen yamilet sullivan kamden hassan tommy skyla elsie dangelo jeramiah yusuf elsie sullivan tommy hassan tommy patience yusuf kaylie elsie yusuf helen patience sullivan tommy hassan kamden madalyn tommy dangelo ross sullivan madalyn chaya jeramiah skyla corey sullivan kamden chaya madalyn corey patience kamden jasiah chaya kamden helen yamilet patience jasiah helen thomas jasiah tommy yusuf chaya tommy tommy corey helen stella kaylie helen hassan kaylie yusuf yamilet yamilet corey dangelo yamilet jasiah dangelo dangelo tommy kaylie jasiah yusuf madalyn jasiah helen dangelo corey yusuf jasiah kamden skyla jasiah dangelo skyla

Part 2 of 4 (125 words)

dangelo jasiah sullivan hassan corey kaylie tommy yamilet dangelo hassan thomas helen thomas
patience yusuf kamden kaylie jasiah jeramiah chaya tommy stella elsie kaylie dangelo helen
sullivan ross stella kamden sullivan kamden kaylie dangelo jeramiah dangelo dangelo ross
kaylie madalyn hassan stella corey tommy jeramiah patience kaylie chaya yusuf yusuf madalyn
jeramiah jeramiah stella tommy patience elsie helen jasiah sullivan kaylie tommy kamden yusuf
stella sullivan yusuf skyla kamden yamilet yusuf stella ross corey yamilet yusuf patience chaya
sullivan thomas stella sullivan jeramiah chaya skyla kamden corey thomas chaya corey yamilet
thomas kaylie jeramiah stella thomas kaylie hassan sullivan chaya helen ross thomas skyla
helen hassan ross madalyn sullivan helen chaya chaya ross madalyn tommy sullivan kaylie
madalyn yamilet helen tommy stella yamilet chaya tommy

Part 3 of 4 (125 words)

jeramiah madalyn kaylie hassan madalyn skyla tommy thomas jeramiah yusuf corey hassan kamden yusuf tommy corey madalyn stella hassan madalyn elsie yamilet thomas kaylie dangelo thomas elsie stella ross jeramiah hassan jasiah ross jeramiah corey thomas helen jasiah stella skyla tommy sullivan corey chaya chaya hassan helen chaya kaylie helen sullivan ross stella chaya madalyn kaylie helen dangelo kamden thomas jeramiah elsie kaylie sullivan hassan ross stella madalyn corey chaya corey tommy ross kaylie helen jeramiah jeramiah jasiah yamilet elsie jasiah kaylie tommy kaylie thomas hassan jeramiah yamilet ross corey sullivan kamden sullivan sullivan sullivan ross chaya madalyn jasiah skyla thomas dangelo madalyn thomas kamden yamilet tommy elsie elsie dangelo dangelo kamden tommy madalyn kamden hassan stella yusuf yusuf thomas yusuf skyla jasiah helen patience

Part 4 of 4 (125 words)

thomas skyla madalyn elsie skyla tommy madalyn patience chaya helen madalyn corey ross
patience patience patience dangelo patience yamilet ross patience kamden jeramiah thomas
helen yusuf chaya madalyn kaylie patience kaylie thomas thomas jasiah jeramiah stella stella
madalyn yusuf hassan kaylie elsie tommy patience corey hassan jasiah jeramiah stella chaya
hassan sullivan patience sullivan ross patience elsie helen jeramiah chaya hassan corey kamden
patience stella thomas yamilet madalyn chaya ross yamilet patience stella ross thomas kaylie
chaya ross hassan skyla ross yamilet yamilet jasiah patience kaylie ross tommy madalyn ross
patience chaya madalyn dangelo yusuf jeramiah tommy patience jasiah jeramiah helen helen
chaya skyla corey yamilet yusuf helen kaylie tommy jeramiah patience patience thomas sullivan
madalyn skyla stella thomas tommy ross corey yamilet skyla corey

Five Groups

Part 1 of 5 (100 words)

helen jasiah kaylie elsie elsie tommy thomas chaya sullivan helen kamden patience kamden
kaylie stella yamilet kamden stella thomas thomas tommy sullivan stella kaylie corey kamden
ross jasiah yamilet dangelo jasiah yusuf skyla stella corey patience elsie kaylie chaya stella
patience jeramiah stella sullivan helen elsie dangelo jeramiah kamden tommy kaylie patience
sullivan yusuf madalyn chaya corey stella ross ross corey patience jasiah hassan kamden sullivan
tommy jasiah helen corey yamilet madalyn chaya thomas sullivan dangelo stella kaylie madalyn
jasiah yusuf ross madalyn skyla yamilet ross elsie kaylie kaylie chaya tommy thomas helen
kaylie yusuf thomas kamden stella jasiah skyla

Part 2 of 5 (100 words)

dangelo madalyn madalyn corey kaylie tommy patience chaya thomas hassan ross skyla kamden madalyn patience dangelo tommy yamilet jeramiah stella helen elsie madalyn kamden sullivan jasiah thomas helen dangelo helen madalyn tommy hassan sullivan tommy yusuf patience helen jeramiah tommy madalyn ross patience yusuf patience helen helen hassan kaylie elsie kamden ross sullivan stella madalyn skyla yusuf tommy stella madalyn yusuf jeramiah ross chaya stella kaylie yamilet jasiah kamden jeramiah tommy yusuf yamilet kamden madalyn helen thomas chaya patience kaylie helen dangelo chaya dangelo hassan tommy helen tommy chaya kamden patience jasiah sullivan stella stella jasiah tommy skyla yamilet skyla

Part 3 of 5 (100 words)

jeramiah skyla corey corey skyla madalyn corey hassan corey corey yamilet yusuf corey dangelo
chaya chaya elsie kamden kamden dangelo thomas chaya dangelo kamden hassan thomas
patience jeramiah thomas stella hassan madalyn tommy elsie jeramiah jeramiah hassan jasiah
hassan yusuf sullivan sullivan elsie tommy kaylie elsie tommy sullivan jeramiah corey dangelo
stella ross yamilet jeramiah yamilet corey patience chaya yamilet jeramiah chaya jasiah thomas
jasiah yamilet patience skyla hassan ross tommy corey sullivan chaya corey stella ross tommy
hassan chaya thomas helen corey helen yamilet yusuf dangelo helen dangelo patience madalyn
tommy hassan skyla yusuf helen yusuf corey dangelo tommy

Part 4 of 5 (100 words)

thomas ross hassan madalyn tommy yamilet dangelo yusuf madalyn jeramiah patience tommy
patience corey jeramiah madalyn patience helen kaylie dangelo yusuf kamden stella jeramiah
kaylie elsie dangelo corey stella kamden kaylie skyla kaylie dangelo tommy chaya hassan tommy
yusuf helen hassan kaylie stella madalyn patience sullivan jasiah thomas hassan tommy yusuf
hassan thomas chaya kamden chaya yamilet kamden corey helen kaylie kamden sullivan elsie
ross yamilet chaya thomas kaylie jasiah chaya corey patience tommy jeramiah sullivan jeramiah
helen sullivan skyla helen yamilet skyla kamden yamilet dangelo sullivan dangelo jeramiah
yusuf madalyn kamden madalyn corey yamilet thomas ross jasiah chaya patience

Part 5 of 5 (100 words)

thomas sullivan hassan skyla jasiah yamilet jeramiah helen helen thomas yusuf patience kamden jasiah hassan ross sullivan elsie kaylie helen thomas ross ross patience yusuf kaylie jeramiah jeramiah sullivan ross stella hassan elsie corey chaya corey sullivan chaya kaylie chaya yusuf jeramiah chaya ross patience helen kamden chaya madalyn kamden sullivan stella madalyn skyla corey ross sullivan ross kaylie thomas patience chaya yamilet skyla helen jeramiah kaylie patience thomas thomas ross ross tommy kaylie sullivan yusuf kaylie hassan jasiah jeramiah yamilet thomas thomas corey jasiah madalyn elsie tommy jasiah ross madalyn sullivan dangelo madalyn yusuf tommy skyla yamilet helen corey

Ten Groups

Part 1 of 10 (50 words)

helen kaylie elsie thomas sullivan kamden kamden stella kamden thomas tommy stella corey
ross yamilet jasiah skyla corey elsie chaya patience stella helen dangelo kamden kaylie sullivan
madalyn corey ross corey jasiah kamden tommy helen yamilet chaya sullivan stella madalyn
yusuf madalyn yamilet elsie kaylie tommy helen yusuf kamden jasiah

Part 2 of 10 (50 words)

dangelo madalyn kaylie patience thomas ross kamden patience tommy jeramiah helen madalyn
sullivan thomas dangelo madalyn hassan tommy patience jeramiah madalyn patience patience
helen kaylie kamden sullivan madalyn yusuf stella yusuf ross stella yamilet kamden tommy
yamilet madalyn thomas patience helen chaya hassan helen chaya patience sullivan stella
tommy yamilet

Part 3 of 10 (50 words)

jeramiah corey skyla corey corey yamilet corey chaya elsie kamden thomas dangelo hassan
patience thomas hassan tommy jeramiah hassan hassan sullivan elsie kaylie tommy jeramiah
dangelo ross jeramiah corey chaya jeramiah jasiah jasiah patience hassan tommy sullivan corey
ross hassan thomas corey yamilet dangelo dangelo madalyn hassan yusuf yusuf dangelo

Part 4 of 10 (50 words)

thomas hassan tommy dangelo madalyn patience patience jeramiah patience kaylie yusuf stella
kaylie dangelo stella kaylie kaylie tommy hassan yusuf hassan stella patience jasiah hassan
yusuf thomas kamden yamilet corey kaylie sullivan ross chaya kaylie chaya patience jeramiah
jeramiah sullivan helen skyla yamilet sullivan jeramiah madalyn madalyn yamilet ross chaya

Part 5 of 10 (50 words)

thomas hassan jasiah jeramiah helen yusuf kamden hassan sullivan kaylie thomas ross yusuf
jeramiah sullivan stella elsie chaya sullivan kaylie yusuf chaya patience kamden madalyn sul-
livan madalyn corey sullivan kaylie patience yamilet helen kaylie thomas ross tommy sullivan
kaylie jasiah yamilet thomas jasiah elsie jasiah madalyn dangelo yusuf skyla helen

Part 6 of 10 (50 words)

jasiah elsie tommy chaya helen patience kaylie yamilet stella thomas sullivan kaylie kamden
jasiah dangelo yusuf stella patience kaylie stella jeramiah sullivan elsie jeramiah tommy pa-
tience yusuf chaya stella ross patience hassan sullivan jasiah corey madalyn thomas dangelo
kaylie jasiah ross skyla ross kaylie chaya thomas kaylie thomas stella skyla

Part 7 of 10 (50 words)

madalyn corey tommy chaya hassan skyla madalyn dangelo yamilet stella elsie kamden jasiah
helen helen tommy sullivan yusuf helen tommy ross yusuf helen hassan elsie ross stella skyla
tommy madalyn jeramiah chaya kaylie jasiah jeramiah yusuf kamden helen chaya kaylie dan-
gelo dangelo tommy tommy kamden jasiah stella jasiah skyla skyla

Part 8 of 10 (50 words)

skylar corey madalyn hassan corey yusuf dangelo chaya kamden dangelo chaya kamden thomas
jeramiah stella madalyn elsie jeramiah jariah yusuf sullivan tommy elsie sullivan corey stella
yamilet yamilet patience yamilet chaya thomas yamilet skylar ross corey chaya stella tommy
chaya helen helen yusuf helen patience tommy skylar helen corey tommy

Part 9 of 10 (50 words)

ross madalyn yamilet yusuf jeramiah tommy corey madalyn helen dangelo kamden jeramiah
elsie corey kamden skyla dangelo chaya tommy helen kaylie madalyn sullivan thomas tommy
hassan chaya chaya kamden helen kamden elsie yamilet thomas jasiah corey tommy sullivan
helen skyla yamilet kamden dangelo dangelo yusuf kamden corey thomas jasiah patience

Part 10 of 10 (50 words)

sullivan skyla yamilet helen thomas patience jasih ross elsie helen ross patience kaylie jeramiah
ross hassan corey corey chaya chaya jeramiah ross helen chaya kamden stella skyla ross ross
thomas chaya skyla jeramiah patience thomas ross kaylie yusuf hassan jeramiah thomas corey
madalyn tommy ross sullivan madalyn tommy yamilet corey

Twenty Groups

Part 1 of 20 (25 words)

helen elsie sullivan kamden kamden tommy corey yamilet skyla elsie patience helen kamden
sullivan corey corey kamden helen chaya stella yusuf yamilet kaylie helen kamden

Part 2 of 20 (25 words)

dangelo kaylie thomas kamden tommy helen sullivan dangelo hassan patience madalyn patience
kaylie sullivan yusuf yusuf stella kamden yamilet thomas helen hassan chaya sullivan tommy

Part 3 of 20 (25 words)

jeramiah skyla corey corey elsie thomas hassan thomas tommy hassan sullivan kaylie jeramiah
ross corey jeramiah jasih hassan sullivan ross thomas yamilet dangelo hassan yusuf

Part 4 of 20 (25 words)

thomas tommy madalyn patience patience yusuf kaylie stella kaylie hassan hassan patience
hassan thomas yamilet kaylie ross kaylie patience jeramiah helen yamilet jeramiah madalyn
ross

Part 5 of 20 (25 words)

thomas jasiah helen kamden sullivan thomas yusuf sullivan elsie sullivan yusuf patience mada-
lyn madalyn sullivan patience helen thomas tommy kaylie yamilet jasiah jasiah dangelo skyla

Part 6 of 20 (25 words)

jasiah tommy helen kaylie stella sullivan kamden dangelo stella kaylie jeramiah elsie tommy
yusuf stella patience sullivan corey thomas kaylie ross ross chaya kaylie stella

Part 7 of 20 (25 words)

madalyn tommy hassan madalyn yamilet elsie jasiah helen sullivan helen ross helen elsie stella
tommy jeramiah kaylie jeramiah kamden chaya dangelo tommy kamden stella skyla

Part 8 of 20 (25 words)

skylar madalyn corey dangelo kamden chaya thomas stella elsie jariah sullivan elsie corey
yamilet patience chaya yamilet ross chaya tommy helen yusuf patience skylar corey

Part 9 of 20 (25 words)

ross yamilet jeramiah corey helen kamden elsie kamden dangelo tommy kaylie sullivan tommy
chaya kamden kamden yamilet jasiah tommy helen yamilet dangelo yusuf corey jasiah

Part 10 of 20 (25 words)

sullivan yamilet thomas jasiah elsie ross kaylie ross corey chaya jeramiah helen kamden skyla
ross chaya jeramiah thomas kaylie hassan thomas madalyn ross madalyn yamilet

Part 11 of 20 (25 words)

kaylie thomas kamden stella thomas stella ross jasiah corey chaya stella dangelo kaylie madalyn
ross jasiah tommy yamilet sullivan madalyn madalyn elsie tommy yusuf jasiah

Part 12 of 20 (25 words)

madalyn patience ross patience jeramiah madalyn thomas madalyn tommy jeramiah patience
helen kamden madalyn stella ross yamilet tommy madalyn patience chaya helen patience stella
yamilet

Part 13 of 20 (25 words)

corey corey yamilet chaya kamden dangelo patience hassan jeramiah hassan elsie tommy dangelo jeramiah chaya jasiah patience tommy corey hassan corey dangelo madalyn yusuf dangelo

Part 14 of 20 (25 words)

hassan dangelo patience jeramiah kaylie stella dangelo kaylie tommy yusuf stella jasiah yusuf
kamden corey sullivan chaya chaya jeramiah sullivan skyla sullivan madalyn yamilet chaya

Part 15 of 20 (25 words)

hassan jeramiah yusuf hassan kaylie ross jeramiah stella chaya kaylie chaya kamden sullivan
corey kaylie yamilet kaylie ross sullivan jasih thomas elsie madalyn yusuf helen

Part 16 of 20 (25 words)

elsie chaya patience yamilet thomas kaylie jasiah yusuf patience stella sullivan jeramiah patience chaya ross hassan jasiah madalyn dangelo jasiah skyla kaylie thomas thomas skyla

Part 17 of 20 (25 words)

corey chaya skyla dangelo stella kamden helen tommy yusuf tommy yusuf hassan ross skyla
madalyn chaya jasiah yusuf helen kaylie dangelo tommy jasiah jasiah skyla

Part 18 of 20 (25 words)

corey hassan yusuf chaya dangelo kamden jeramiah madalyn jeramiah yusuf tommy sullivan
stella yamilet yamilet thomas skyla corey stella chaya helen helen tommy helen tommy

Part 19 of 20 (25 words)

madalyn yusuf tommy madalyn dangelo jeramiah corey skyla chaya helen madalyn thomas
hassan chaya helen elsie thomas corey sullivan skyla kamden dangelo kamden thomas pa-
tience

Part 20 of 20 (25 words)

skylar helen patience ross helen patience jeramiah hassan corey chaya ross chaya stella ross
thomas skylar patience ross yusuf jeramiah corey tommy sullivan tommy corey