

MapReduce

Classroom example

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

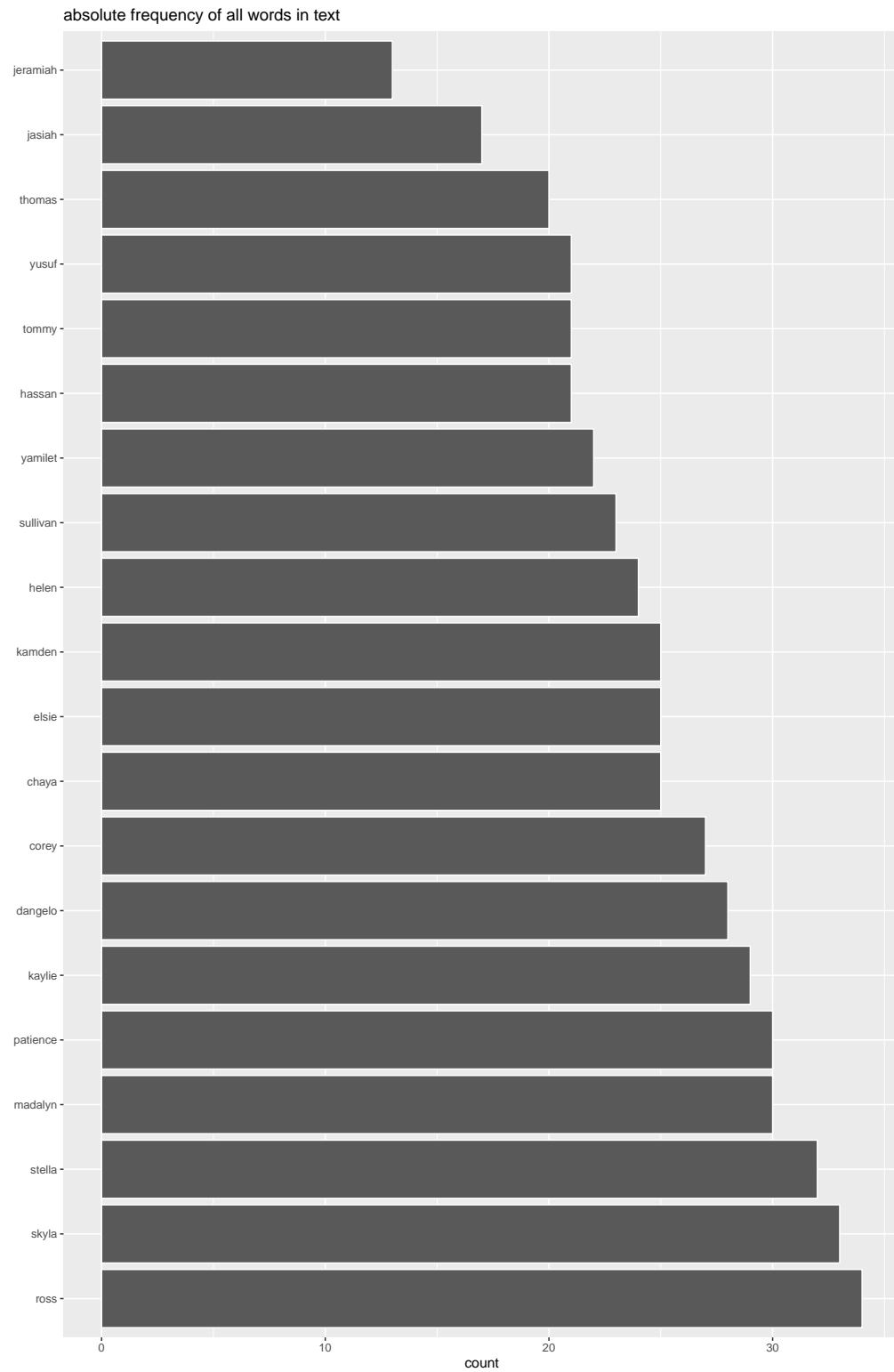
1. print this file
2. give the raw file to 1-4 students, they shall count the words. Measure the time. This is sequential processing.
3. give the chunked file to the respective number of students. There are $n = 2, 4, 5, 10$ groups available. The number of students is the chunk server.
4. one student 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?

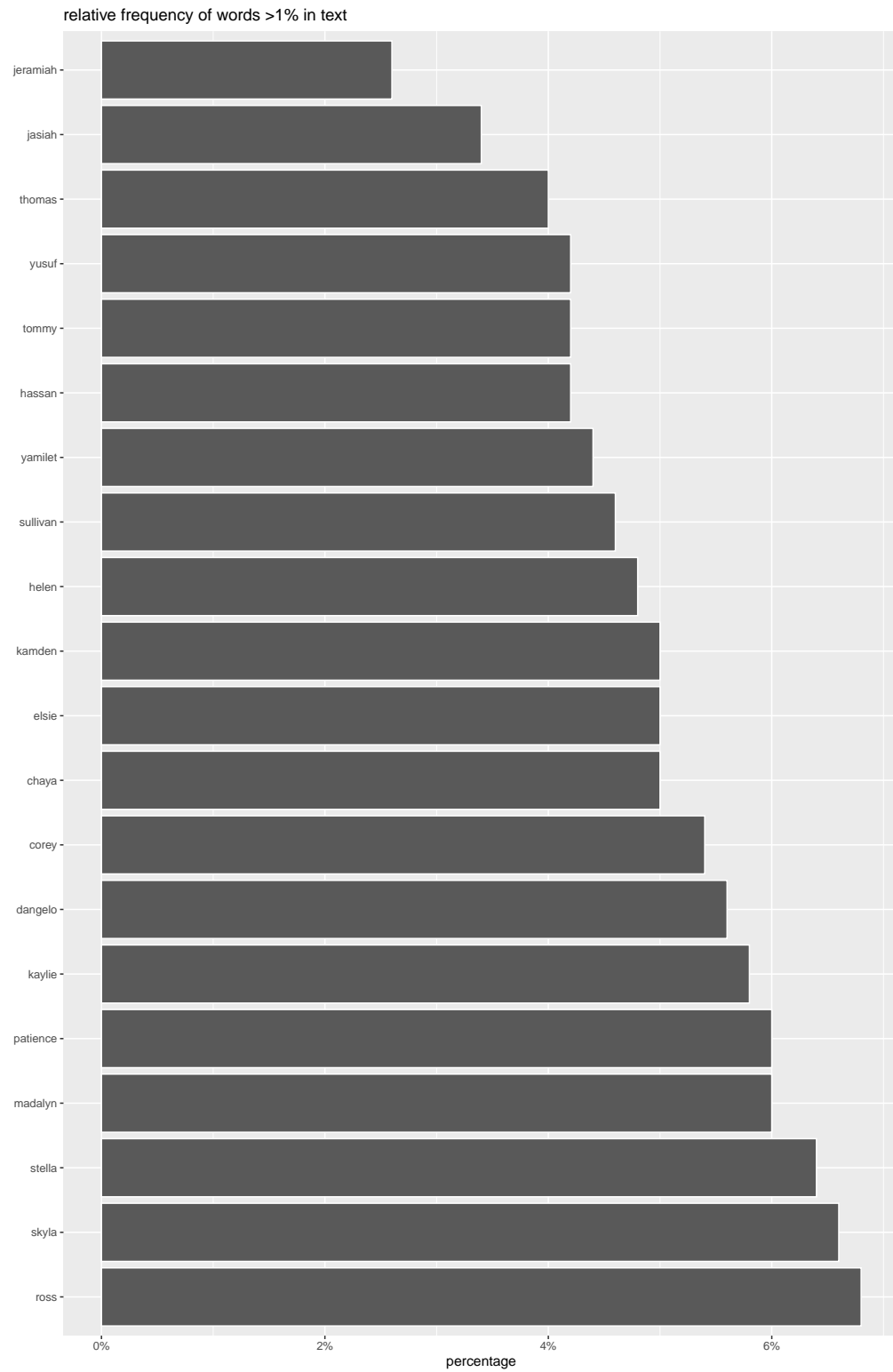
some summary statistics on the raw data

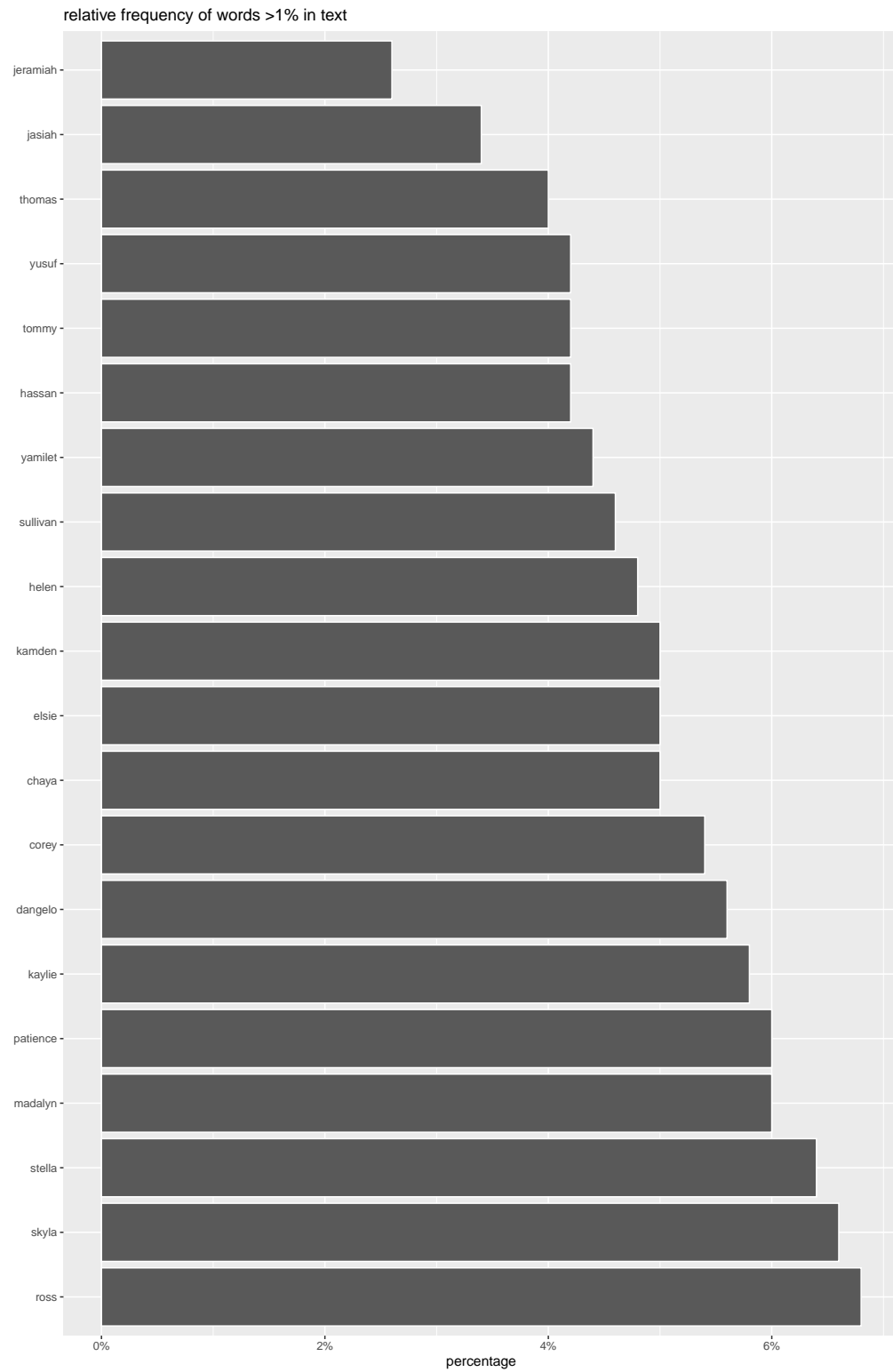
In total there are 500 words available.

words	Freq	percentage	percentage_round
ross	34	6.80%	6.80%
skyla	33	6.60%	6.60%
stella	32	6.40%	6.40%
madalyn	30	6.00%	6.00%
patience	30	6.00%	6.00%
kaylie	29	5.80%	5.80%
dangelo	28	5.60%	5.60%
corey	27	5.40%	5.40%
chaya	25	5.00%	5.00%
elsie	25	5.00%	5.00%
kamden	25	5.00%	5.00%
helen	24	4.80%	4.80%

sullivan	23	4.60%	4.60%
yamilet	22	4.40%	4.40%
hassan	21	4.20%	4.20%
tommy	21	4.20%	4.20%
yusuf	21	4.20%	4.20%
thomas	20	4.00%	4.00%
jasiah	17	3.40%	3.40%
jeramiah	13	2.60%	2.60%







The Raw data 01

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

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

The Raw data 02

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

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

The Raw data 03

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

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

The Raw data 04

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

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

Two Groups

Part 1 of 2 (250 words)

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

Part 2 of 2 (250 words)

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

Four Groups

Part 1 of 4 (125 words)

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

Part 2 of 4 (125 words)

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

Part 3 of 4 (125 words)

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

Part 4 of 4 (125 words)

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

Five Groups

Part 1 of 5 (100 words)

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

Part 2 of 5 (100 words)

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

Part 3 of 5 (100 words)

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

Part 4 of 5 (100 words)

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

Part 5 of 5 (100 words)

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

Ten Groups

Part 1 of 10 (50 words)

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

Part 2 of 10 (50 words)

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

Part 3 of 10 (50 words)

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

Part 4 of 10 (50 words)

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

Part 5 of 10 (50 words)

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

Part 6 of 10 (50 words)

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

Part 7 of 10 (50 words)

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

Part 8 of 10 (50 words)

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

Part 9 of 10 (50 words)

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

Part 10 of 10 (50 words)

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

Twenty Groups

Part 1 of 20 (25 words)

helen sullivan elsie jeramiah jeramiah yusuf chaya elsie madalyn yusuf stella madalyn dangelo
skylar ross hassan tommy sullivan chaya hassan yusuf elsie tommy stella tommy

Part 2 of 20 (25 words)

patience kaylie patience skyla patience kamden madalyn madalyn patience patience tommy
sullivan skyla stella ross chaya kaylie ross dangelo yusuf elsie dangelo elsie sullivan jeramiah

Part 3 of 20 (25 words)

tommy stella skyla stella patience yusuf hassan hassan hassan jasiah corey ross madalyn patience kamden stella skyla tommy madalyn jasiah ross helen tommy kamden madalyn

Part 4 of 20 (25 words)

ross yusuf hassan jasiah patience hassan jasiah patience chaya kamden hassan skyla skyla
stella kamden skyla kaylie stella yusuf kaylie hassan madalyn yamilet ross kamden

Part 5 of 20 (25 words)

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

Part 6 of 20 (25 words)

yamilet dangelo corey dangelo kamden jeramiah jeramiah kamden patience sullivan skyla
elsie kaylie sullivan sullivan helen elsie sullivan patience patience madalyn skyla yamilet stella
sullivan

Part 7 of 20 (25 words)

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

Part 8 of 20 (25 words)

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

Part 9 of 20 (25 words)

yamilet helen corey sullivan yamilet dangelo ross kaylie jeramiah thomas jasiah hassan thomas
corey madalyn corey dangelo jasiah skyla kaylie elsie corey tommy helen ross

Part 10 of 20 (25 words)

sullivan patience patience dangelo tommy chaya jasiah elsie stella stella tommy ross tommy
kamden dangelo helen chaya skyla ross ross yamilet tommy jasiah madalyn elsie

Part 11 of 20 (25 words)

patience elsie jasiah madalyn stella thomas yamilet kamden yamilet kaylie ross kamden kaylie
sullivan dangelo kaylie thomas stella skyla corey ross ross dangelo elsie jeramiah

Part 12 of 20 (25 words)

madalyn thomas chaya skyla elsie ross hassan yusuf ross patience madalyn ross chaya chaya
yamilet kaylie ross madalyn sullivan dangelo helen ross sullivan elsie elsie

Part 13 of 20 (25 words)

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

Part 14 of 20 (25 words)

ross yamilet yamilet corey corey helen patience elsie tommy corey hassan skyla stella madalyn
skyla corey thomas yusuf helen thomas helen hassan elsie thomas yamilet

Part 15 of 20 (25 words)

skyla chaya yamilet thomas stella patience ross helen skyla kaylie helen dangelo dangelo skyla
thomas corey skyla ross tommy corey corey hassan corey corey elsie

Part 16 of 20 (25 words)

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

Part 17 of 20 (25 words)

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

Part 18 of 20 (25 words)

yamilet kamden helen ross hassan kaylie yusuf kamden jasiah patience helen sullivan kamden
thomas yusuf yusuf hassan kaylie kaylie hassan yusuf hassan jeramiah patience dangelo

Part 19 of 20 (25 words)

kamden kaylie kamden thomas yusuf jeramiah skyla sullivan ross elsie madalyn thomas dangelo
yusuf stella kaylie dangelo patience skyla helen ross jasiah madalyn madalyn elsie

Part 20 of 20 (25 words)

kaylie sullivan ross corey yamilet chaya chaya stella kamden sullivan patience chaya ross sullivan tommy dangelo jeramiah skyla corey dangelo corey stella tommy yamilet kaylie