Project1

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Project 1: Chess Tournament Data

In this project, we're given a text file with chess tournament results where the information has some structure. Our job is to create an R Markdown file that generates a .CSV file (that could for example be imported into a SQL database). That file should contain the Player's Name, Player's State, Total Number of Points, Player's Pre-Rating, and Average Pre Chess Ratings of Opponents.

Data

We've received a .txt file that is tab delimited ("\t") and need to clean it up. The information provided on the sheet is the players rank, name location, rating (both before & after the tournament), the number of points they've scored, and the results of all their matches.

```
data <- readLines("tournamentinfo.txt")
head(data)</pre>
```

```
[2] " Pair | Player Name
                                                   |Total|Round|Round|Round|Round|Round|"
   [3] " Num | USCF ID / Rtg (Pre->Post)
   [5]
            1 | GARY HUA
                                                   16.0
                                                         l W
                                                              39 | W
                                                                    21 | W
                                                                          18|W
                                                                                 14|W
                                                                                        7 | D
                                                                                              12|D
                                                                                                     4|"
## [6]
           ON | 15445895 / R: 1794
                                                   |N:2
                                                                ΙB
                                                                                         ΙB
                                       ->1817
                                                         l W
                                                                      l W
                                                                             lΒ
                                                                                   l W
                                                                                                l W
```

Cleaning the Data

We can see that our data actually starts on the 5th row, so we'll skip the first 4 rows. To do this, we can create a data frame out of the data from the file, and then slice out those first 4 rows. Note: I'm using the length of the original data import to guage the number of rows available. I can also check using tail() but this will dynamically adjust should there be another tournament file available.

```
df <- data.frame(data)
df <- df[5:length(data),]
head(df)</pre>
```

```
## [1]
                                                                                  18|W
                                                                                          14|W
                                                                                                  7 | D
                                                                                                        12|D
                                                                                                                41
             1 | GARY HUA
                                                        16.0
                                                               | W
                                                                    39|W
                                                                           21 | W
##
   [2]
            ON | 15445895 / R: 1794
                                           ->1817
                                                        |N:2
                                                                              | W
                                                                                     |B
                                                                                                   ΙB
   [3]
## [4]
                                                                                    4|W
             2 | DAKSHESH DARURI
                                                        16.0
                                                               ١W
                                                                    63 I W
                                                                           58 I L
                                                                                                        20 I W
                                                                                                                71
                                                                                         17|W
                                                                                                 16 W
## [5]
            MI | 14598900 / R: 1553
                                           ->1663
                                                        |N:2
                                                               lΒ
                                                                      | W
                                                                              ΙB
                                                                                     l W
                                                                                            lΒ
                                                                                                   | W
                                                                                                           lΒ
## [6]
```

After several attemps of ingesting the data and converting the tabs to commas, the only successful way to access the data was through the sequence function. Since the rows are not consistent with data, we'll have to create two variables for different sets of sequences. Looking at the head of the dataframe above, we see that we can extract the players rating, name, score, and results from row 1, and the players location, and ranks pre/post tournament.

```
players <- df[seq(1, length(df), 3)]
ratings <- df[seq(2, length(df), 3)]</pre>
```

Next we'll have to extract data from each of these sequences to prep for our final data frame.

```
library(stringr)
id <- as.integer(str_extract(players, "[[:digit:]]+"))
names <- str_trim(str_extract(players, "([[:alpha:]]+\\s){2,3}"))
location <- str_extract(ratings, "[[:alpha:]]+")
scores <- str_extract(players, "\\d+\\.\\d+")
rating <- as.integer(str_extract(str_extract(ratings, "[^\\d]\\d{3,4}[^\\d]"), "\\d+"))
opponents <- str_extract_all(str_extract_all(players, "[[:digit:]]+\\|"), "[[:digit:]]+")

## Warning in stri_extract_all_regex(string, pattern, simplify = simplify, :
## argument is not an atomic vector; coercing</pre>
```

Get Average of Opponents Ratings

We're going to have to identify the opponents of each player, and then get a mean rating for each to help determine the strength of their opponents.

```
opponent_ratings <- length(players)
for (i in 1:length(players)) {
  opponent_ratings[i] <- round(mean(rating[as.numeric(unlist(opponents[as.integer(id)[i]]))]), digits =
}</pre>
```

Create Data Frame

Utilizing the knitr library, we can create a table to list the results. Additionally, we'll add titles to each of the columns.

```
library(knitr)
ndf <- data.frame(names, location, scores, rating, opponent_ratings)
colnames(ndf) <- c("Player's Name", "Player's State", "Total Number of Points", "Player's Pre-Rating",
kable(ndf, caption = "Chess Tournament Results", format = "markdown")</pre>
```

Player's Name	Player's State	Total Number of Points	Player's Pre-Rating	Average Pre Chess Rating of Opponents
GARY HUA	ON	6.0	1794	1605
DAKSHESH	MI	6.0	1553	1469
DARURI				
ADITYA BAJAJ	MI	6.0	1384	1564

Player's Name	-	Player's	Total Number of	Player's	Average Pre Chess Rating of
SCHILLING HANSHI ZUO MI 5.5 1655 1501 HANSEN SONG OH 5.0 1686 1519 GARY DEE MI 5.0 1649 1372 SWATHELL EZEKIFL MI 5.0 1641 1468 HOUGHTON STEFANO LEE ON 5.0 1411 1523 ANVIT RAO MI 5.0 1365 1554 CAMERON MI 4.5 1712 1468 WILLIAM MC KENNETH J MI 4.5 1663 1506 TACK TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1610 1515 ZACHARY MI 4.5 1610 1515 ZACHARY MI 4.5 1620 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1629 1499 GRZEGORCZYK DAVID MI 4.0 1604 1480 SUNDEEN DIPANKAR ROY MI 4.0 1604 1480 SUNDEEN DIPANKAR ROY MI 4.0 1595 1411 DINH DANG BUI ON 4.0 1595 1411 DINH DANG BUI ON 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE R MI 4.0 1563 1579 1507 EUGENE R MI 4.0 1563 1579 EUGENE R MI 4.0 1570 EUGENE R MI 4.0 157	Player's Name				-
SCHILLING HANSHI ZUO MI 5.5 1655 1501 HANSEN SONG OH 5.0 1686 1519 GARY DEE MI 5.0 1649 1372 SWATHELL EZEKIFL MI 5.0 1641 1468 HOUGHTON STEFANO LEE ON 5.0 1411 1523 ANVIT RAO MI 5.0 1365 1554 CAMERON MI 4.5 1712 1468 WILLIAM MC KENNETH J MI 4.5 1663 1506 TACK TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1610 1515 ZACHARY MI 4.5 1610 1515 ZACHARY MI 4.5 1620 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1629 1499 GRZEGORCZYK DAVID MI 4.0 1604 1480 SUNDEEN DIPANKAR ROY MI 4.0 1604 1480 SUNDEEN DIPANKAR ROY MI 4.0 1595 1411 DINH DANG BUI ON 4.0 1595 1411 DINH DANG BUI ON 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE L MI 4.0 1563 1470 EUGENE R MI 4.0 1563 1579 1507 EUGENE R MI 4.0 1563 1579 EUGENE R MI 4.0 1570 EUGENE R MI 4.0 157	PATRICK H	MI	5.5	1716	1574
HANSHI ZUO		1111	0.0	1110	1011
HANSEN SONG		MI	5.5	1655	1501
GARY DEE MI 5.0 1649 1372 SWATHELL EZEKIEL MI 5.0 1641 1468 HOUGHTON STEFANO LEE ON 5.0 1411 1523 ANVIT RAO MI 5.0 1365 1554 CAMERON MI 4.5 1712 1468 WILLIAM MC KENNETH J MI 4.5 1663 1506 TACK TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1610 1515 ZACHARY MI 4.5 1220 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1609 1499 GRZEGORCZYK DAVID MI 4.0 1609 1499 GRZEGORCZYK DAVID MI 4.0 1563 1410 DINH DANG BUI ON 4.0 1563 1411 DINH DANG BUI ON 4.0 1563 1411 DINH DANG BUI ON 4.0 1563 1410 DINH DANG BUI ON 4.0 1563 1411 DINH DANG BUI ON 4.0 1563 1229 ALAN BUI ON 5.5 1552 1222 ALAN BUI ON 5.5 1507 1507 GAURAV MI 3.5 1507 1502 CHIEDOZIE MI 3.5 1449 1260 JONES RISHI SHETTY MI 3.5 1449 1260 JONES RISHI SHETTY MI 3.5 1449 1279 MATHEWS JADE GE MI 3.5 1449 1279 MATHEWS JADE GE MI 3.5 1449 1279 MATHEMS JADE GE MI 3.5 1449 1279 MATHEMS JADE GE MI 3.5 1449 1277 MATHEMS JADE GE MI 3.5 1449 1277 MATHEMS JOSHUA DAVIID MI 5.5 1448 1438					
SWATHELL EZEKIEL MI 5.0 1641 1468 1610 161					
EZERIEL MI		IVII	0.0	1043	1972
HOUGHTON STEFANO LEE		MI	5.0	1641	1468
STEPANO LEE		IVII	5.0	1041	1400
ANVIT RAO MI CAMERON MI A5 1365 1354 CAMERON MI A5 1712 1468 WILLIAM MC KENNETH J MI A5 1663 1506 TACK TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1610 1515 ZACHARY MI 4.5 1620 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1829 1499 GRZEGORCZYK DAVID MI 4.0 1600 1480 SUNDEEN DIPANKAR ROY MI 4.0 1564 1498 1499 1499 MI 4.0 1564 1499 1499 MI 4.0 1564 1496 1498 MI 1564 1406 1595 1411 DINH DANG BUI ON 4.0 1563 1470 EUGENE L MI MI MI MI MI MI MI MI MI M		ON	5.0	1./11	1599
CAMERON MI					
WILLIAM MC KENNETH J MI 4.5 KENNETH J MI 4.5 TACK TORRANCE MI 4.5 TORRANCE MI 4.0 TORRACC MI 4.0 TO					
KENNETH J		IVII	4.5	1712	1408
TACK TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1220 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1629 1499 GRZEGORCZYK DAVID MI 4.0 1600 1480 SUNDEEN DIPANKAR ROY MI 4.0 1564 1426 JASON ZHENG MI 4.0 1595 1411 DINH DANG BUI ON 4.0 1595 1411 DINH DANG BUI ON 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1229 1357 ALDRICH LOREN MI 3.5 1745 1363 SCHWIEBERT MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1579 1507 GAURAV MI 3.5 1579 GAURAV MI 3.5 1507 GAURAV MI 3.5 1444 JONES RISHI SHETTY MI 3.5 1494 JONES RISHI SHETTY MI 3.5 1494 JONES RISHI SHETTY MI 3.5 1449		3.57	, .	1000	4700
TORRANCE MI 4.5 1666 1498 HENRY JR BRADLEY SHAW MI 4.5 1610 1515 ZACHARY MI 4.5 1220 1484 JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1629 1499 GRZEGORCZYK DAVID MI 4.0 1600 1480 SUNDEEN DIPANKAR ROY MI 4.0 1595 1411 DINH DANG BUI ON 4.0 1595 1411 DINH DANG BUI ON 4.0 1563 1470 EUGENE L MI 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1563 1214 MICHAEL R MI 4.0 1229 1357 ALDRICH LOREN MI 3.5 1745 1363 SCHWIEBERT MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 GIDWANI SOFIA ADINA MI 3.5 1507 1522 GIDWANI SOFIA ADINA MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1449 1277 MICHAEL MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JATES HOMAS JOSHUA DAVID MI 3.5 1399 1375		MI	4.5	1663	1506
HENRY JR) (T		1000	1400
BRADLEY SHAW MI		MI	4.5	1666	1498
ZACHARY					
JAMES HOUGHTON MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1609 1499 GRZEGORCZYK DAVID MI 4.0 1600 1480 SUNDEEN DIPANKAR ROY MI 4.0 1564 1426 JASON ZHENG MI 4.0 1563 1411 DINH DANG BUI ON 4.0 1563 1410 DINDEEN BUGENE L MI 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1363 1214 MICHAEL R MI 4.0 1229 1357 ALDRICH LOREN MI 3.5 1745 1363 SCHWIEBERT MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 152 1441 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1499 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1399 1375					
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MIKE NIKITIN MI 4.0 1604 1386 RONALD MI 4.0 1629 1499 GRZEGORCZYK BI499 1499 DAVID MI 4.0 1600 1480 SUNDEEN DIPANKAR ROY MI 4.0 1564 1426 JASON ZHENG MI 4.0 1595 1411 DINH DANG BUI ON 4.0 1563 1470 EUGENE L MI 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1363 1214 MICHAEL R MI 4.0 1229 1357 ALDRICH U 1229 1357 LOREN MI 3.5 1579 1507 MAX ZHU ON 3.5 1552 1222 GIDWANI 3.5 1507 1522 1144 OKORIE GEORGE AVERY ON 3.5 1522 1144 100E JOSHUA PHILIP					
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DAVID MI	RONALD	MI	4.0	1629	1499
SUNDEEN SUND	GRZEGORCZYK				
DIPANKAR ROY MI	DAVID	MI	4.0	1600	1480
JASON ZHENG	SUNDEEN				
JASON ZHENG		MI	4.0	1564	1426
DINH DANG BUI ON 4.0 1563 1470		MI	4.0	1595	1411
EUGENE L MI 4.0 1555 1300 MCCLURE ALAN BUI ON 4.0 1363 1214 MICHAEL R MI 4.0 1229 1357 ALDRICH TOREN					
MCCLURE ALAN BUI ON 4.0 1363 1214 MICHAEL R MI 4.0 1229 1357 ALDRICH Tabbelle Research LOREN MI 3.5 1745 1363 SCHWIEBERT Tabbelle Research MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES TISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 127 MICHAEL MI 3.5 1499 1375 JEFFERY THOMAS 149 127 JOSHUA DAVID MI 3.5 1438 1150 <td></td> <td></td> <td></td> <td></td> <td></td>					
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ALDRICH					
LOREN MI 3.5 1745 1363 SCHWIEBERT MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		1411	1.0	1220	1001
SCHWIEBERT MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS 150 1438 1150		MI	3.5	1745	1363
MAX ZHU ON 3.5 1579 1507 GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES ISSHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		IVII	5.5	1740	1303
GAURAV MI 3.5 1552 1222 GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		ON	2 5	1570	1507
GIDWANI SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150					
SOFIA ADINA MI 3.5 1507 1522 CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		IVII	5.5	1992	1222
CHIEDOZIE MI 3.5 1602 1314 OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		MI	2 5	1507	1500
OKORIE GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150					
GEORGE AVERY ON 3.5 1522 1144 JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		IVII	3.5	1602	1314
JONES RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		OM	0.5	1500	1144
RISHI SHETTY MI 3.5 1494 1260 JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		ON	3.5	1522	1144
JOSHUA PHILIP ON 3.5 1441 1379 MATHEWS </td <td></td> <td></td> <td></td> <td></td> <td></td>					
MATHEWS JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150					
JADE GE MI 3.5 1449 1277 MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150		ON	3.5	1441	1379
MICHAEL MI 3.5 1399 1375 JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150					
JEFFERY THOMAS JOSHUA DAVID MI 3.5 1438 1150					
THOMAS JOSHUA DAVID MI 3.5 1438 1150		MI	3.5	1399	1375
JOSHUA DAVID MI 3.5 1438 1150	JEFFERY				
	THOMAS				
LEE	JOSHUA DAVID	MI	3.5	1438	1150
	LEE				

	Player's	Total Number of	Player's	Average Pre Chess Rating of
Player's Name	State	Points	Pre-Rating	Opponents
SIDDHARTH JHA	MI	3.5	1355	1388
AMIYATOSH	MI	3.5	980	1385
PWNANANDAM				
BRIAN LIU	MI	3.0	1423	1539
JOEL R HENDON	MI	3.0	1436	1430
FOREST ZHANG	MI	3.0	1348	1391
KYLE WILLIAM	MI	3.0	1403	1248
MURPHY				
JARED GE	MI	3.0	1332	1150
ROBERT GLEN	MI	3.0	1283	1107
VASEY				
JUSTIN D	MI	3.0	1199	1327
SCHILLING				
DEREK YAN	MI	3.0	1242	1152
JACOB	MI	3.0	377	1358
ALEXANDER				
LAVALLEY				
ERIC WRIGHT	MI	2.5	1362	1392
DANIEL KHAIN	MI	2.5	1382	1356
MICHAEL J	MI	2.5	1291	1286
MARTIN				
SHIVAM JHA	MI	2.5	1056	1296
TEJAS	MI	2.5	1011	1356
AYYAGARI				
ETHAN GUO	MI	2.5	935	1495
JOSE C YBARRA	MI	2.0	1393	1345
LARRY HODGE	MI	2.0	1270	1206
ALEX KONG	MI	2.0	1186	1406
MARISA RICCI	MI	2.0	1153	1414
MICHAEL LU	MI	2.0	1092	1363
VIRAJ MOHILE	MI	2.0	917	1391
SEAN M MC	MI	2.0	853	1319
JULIA SHEN	MI	1.5	967	1330
JEZZEL FARKAS	ON	1.5	955	1327
ASHWIN BALAJI	MI	1.0	1530	1186
THOMAS	MI	1.0	1175	1350
JOSEPH				
HOSMER				
BEN LI	MI	1.0	1163	1263

Writing Data Frame to .csv

write.csv(ndf, file = "tournament_results.csv")