

1. Discussion of how you converted the dataset into tables.

From the csv file I downloaded from baseball reference, I manually filtered out the overlapping columns and group them into tables to minimize data redundancies. For instance, instead of keeping the player names in each category (batting, pitching, fielding), I have created 3 sperate tables for players. Same happens for teams and managers.

In MySQL, I wrote the create statements to create tables under a new schema, and I manually set the primary and foreign keys within the queries. Due to the large amount of data, I used [Mr. Data Converter \(thdoan.github.io\)](https://thdoan.github.io) to assist me while inserting the data. It generates the insert statement, and all I have to do is to make sure they are inserting to the correct table.

2. Challenges faced during importing of your data and how did you overcome these data importation challenges.

I ran into a couple challenges during the process. First being renaming the columns, some column names contain special characters such as "+", and some start with numbers. To create tables in MySQL, these kinds of column names need to be changed, or else it is going to return errors. Therefore, I must change "+" into plus and put an underscore before columns whose name starts with a number.

I also ran into an error while inserting data for the table. It returns the following:

Error Code: 1452. Cannot add or update a child row.

Later I am able to notice that in the player_batting, player_pitching, and player_fielding tables, the original csv contains an overall row for players who changed team during the season. So, when a player played for team A and B in the same season, there are 3 rows of records, being stats from Team A, stats from Team B, and Total stats that combine the two rows. The problem is the data has this kind of rows labeled as "TOT" in the TeamID column, which cannot be connected to a TeamID in the Teams table. Therefore, I manually filtered out all the TOT rows and deleted them.

3. A complete data dictionary for every table in your database.



Data
Dictionary.xlsx

4. Business Questions

1. Which player hit the most HR for each team?
2. Who is the most frequently traded player in the 2023 season?
3. Who has the highest hitting percentage in each age level? List out the leaders and the average of each age level.
4. Does successful rate of challenges by the managers translate to wins? List out number of wins and calculate the rate.
5. Does lower Batting Park Factor really tie with lower batting averages?
6. Do more fielding errors lead to more losses?
7. List out each team's Runs per game and Runs allowed per game. How does this margin impact the result of games?
8. Does Runners Left On Base impact Runs scored per game? List these two columns out for each team.
9. Which player(non-pitcher) played the most game not starting?
10. List out any player who has appeared as both batter and pitcher and their stats.
11. Ranking pitchers who created the most double plays.

Proof of Table Creation

The screenshot displays a database management interface. On the left, a tree view shows the 'baseball_stats' schema with the following tables: manager_records, managers, player_batting, player_fielding, player_pitching, players, team_batting, team_fielding, team_operations, team_pitching, and teams. Below the tables are Views, Stored Procedures, and Functions.

The main window shows a SQL query: `select * from players`. The query result is displayed in a table with columns: PlayerID, Name, and Age. The results are as follows:

PlayerID	Name	Age
abaf001	Fernando Abad	37
abaf001	Andrew Abbott	24
abaf001	Cory Abbott	27
abaf001	CJ Abrams	22
abaf001	Albert Abreu	27
abaf001	Bryan Abreu	26
abaf001	Dion Abreu	36
abaf001	Wilyer Abreu	24
abaf001	Domingo Acosta	29
abaf001	Garrett Acton	25
abaf001	Ronald Acuna Jr.	25
abaf001	Willy Adams	27
abaf001	Jason Adams	31
abaf001	Austin Adams	32
abaf001	Jordan Adams	23
abaf001	Riley Adams	27
abaf001	Ty Adcock	26
abaf001	Jo Adell	24
abaf001	Sean Adon	24
abaf001	Ehire Adrianza	33
abaf001	Jesús Aguilar	33
abaf001	Rock Almond	33
abaf001	Keegan Akin	28
abaf001	Francis Alberto	36
abaf001	Criste Albin	36
abaf001	Jorge Alcala	27

The bottom of the screenshot shows the 'Query' tab with the following output:

#	Time	Action	Message	Duration / Fetch
1	19:06:33	select * from manager_records LIMIT 0, 1000	31 rows returned	0:00:00 sec / 0:00:00 sec
2	19:07:00	select * from players LIMIT 0, 1000	1000 rows returned	0:00:00 sec / 0:00:00 sec

Navigator

SQL File 15*

1 • select * from team

Result Grid

TeamID	TeamName	League
ARI	Arizona Diamondbacks	NL
ATL	Atlanta Braves	NL
BAL	Baltimore Orioles	AL
BOS	Boston Red Sox	AL
CHC	Chicago Cubs	NL
CHW	Chicago White Sox	AL
CIN	Cincinnati Reds	NL
CLE	Cleveland Guardians	AL
COL	Colorado Rockies	NL
DET	Detroit Tigers	AL
HOU	Houston Astros	AL
KCS	Kansas City Royals	AL
LAA	Los Angeles Angels	AL
LAD	Los Angeles Dodgers	NL
MIA	Miami Marlins	NL
MIL	Milwaukee Brewers	NL
MNI	Minnesota Twins	AL
NYN	New York Mets	NL
NYW	New York Yankees	AL
OAK	Oakland Athletics	AL
PHI	Philadelphia Phillies	NL
PIT	Pittsburgh Pirates	NL
SDP	San Diego Padres	NL
SEA	Seattle Mariners	AL
SFG	San Francisco Giants	NL
STL	St. Louis Cardinals	NL

Items 1

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:06:33	select * from manager_records LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec
2	19:07:00	select * from players LIMIT 0, 1000	1000 rows returned	0.000 sec / 0.000 sec
3	19:07:34	select * from teams LIMIT 0, 1000	30 rows returned	0.019 sec / 0.000 sec

Navigator

SQL File 15*

1 • select * from manager

Result Grid

ManagerID	Name	Age
1	Dusty Baker	74
2	Pecco Barfield	42
3	David Bell	50
4	Bud Black	66
5	Bruce Bochy	68
6	Aaron Boone	50
7	Kevin Cash	45
8	Alex Cora	47
9	Kai Correa	35
10	Craig Counsell	52
11	Terry Francona	64
12	Pedro Grifol	53
13	A.J. Hinch	49
14	Brandon Hyde	49
15	Gabe Kapler	47
16	Mark Kotay	47
17	Tony Londo	37
18	Oliver Marmol	36
19	Dave Martinez	38
20	Bob Melvin	61
21	Phil Nevin	52
22	Matt Quattrone	49
23	Dane Roberts	51
24	David Ross	46
25	John Schneider	43
26	Rob Schumaker	43

managers 4

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:06:33	select * from manager_records LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec
2	19:07:00	select * from players LIMIT 0, 1000	1000 rows returned	0.000 sec / 0.000 sec
3	19:07:34	select * from teams LIMIT 0, 1000	30 rows returned	0.015 sec / 0.000 sec
4	19:07:50	select * from managers LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec

Navigator

SQL File 15*

1 • select * from player_pitching

Result Grid

PlayerID	TeamID	Year	Wins	Losses	ERA	Games	GameStarted	GF	CG	Shutouts	Sevies	IP	H	R	ER	HR	BB	SO	WHIP	BK	WP	BF	ERA_plus	FIP	WHIP	H9	HR9	BB9	SO9	SOW	
abae001	COL	2023	1	0	4.26	6	0	2	0	0	0	6.1	11	3	3	2	3	0	2	0	0	32	124	8.15	2.211	15.6	2.8	4.3	2.8	0.67	
abae001	CIN	2023	8	6	2.87	21	21	0	0	0	0	109.1	200	47	47	16	44	0	120	1	1	1	459	118	4.2	1.317	8.2	1.3	2.6	9.5	2.75
abae001	WSN	2023	1	2	6.64	22	0	10	0	0	0	39.1	48	29	29	9	19	0	40	4	1	4	183	65	5.95	1.703	11	2.1	4.3	9.2	2.11
abae001	NYW	2023	2	2	4.73	45	0	19	0	0	0	59	52	39	31	9	35	1	61	6	0	5	268	92	5.26	1.475	7.9	1.4	5.3	9.3	1.74
abae001	HOU	2023	3	2	1.75	72	0	16	0	0	5	72	44	17	14	6	31	0	200	3	0	1	287	241	2.98	1.042	5.5	0.8	3.9	12.5	3.23
abae001	OAK	2023	0	0	10.61	9	0	1	0	0	0	9.1	16	11	11	2	7	1	0	1	0	47	40	5.51	1.929	15.4	1.9	1.9	6.8	3.5	
abae001	OAK	2023	0	0	12.71	6	0	3	0	0	0	5.2	9	8	8	3	5	2	5	1	0	0	32	34	11.55	2.471	14.3	4.8	7.9	7.9	1
abae001	TBA	2023	4	2	2.98	36	0	22	0	0	12	54.1	35	21	18	7	20	0	69	8	0	2	222	140	3.99	1.012	5.8	1.2	3.3	11.4	3.48
abae001	SEA	2023	0	1	5.71	24	0	1	0	0	0	17.1	16	12	11	1	8	0	22	5	0	2	81	78	3.72	1.385	8.3	0.5	4.2	11.4	2.75
abae001	SEA	2023	0	0	3.45	12	0	4	0	0	0	15.2	11	7	6	4	0	0	11	0	0	0	58	120	5.17	0.793	6.3	2.3	0	6.3	2.88
abae001	WSN	2023	2	4	6.45	12	10	2	0	0	0	51.2	60	37	37	8	24	3	48	3	0	6	240	67	4.98	1.626	10.5	1.4	4.2	8.4	2
abae001	BAL	2023	2	2	6.85	24	1	7	0	0	0	23.2	35	22	18	2	7	2	27	0	0	2	112	61	2.96	1.775	13.3	0.8	2.7	10.3	3.86
abae001	CHW	2023	0	0	21.6	2	0	2	0	0	0	1.2	5	4	4	1	1	0	1	0	0	0	12	25	11.66	4.2	32.4	5.4	5.4	5.4	1
abae001	MNI	2023	0	1	6.23	11	0	3	0	0	0	17.1	14	13	12	5	10	0	16	1	0	0	75	70	3.06	1.385	7.3	2.6	5.2	8.3	1.6
abae001	MIA	2023	7	12	4.14	28	28	0	3	1	0	184.2	176	91	85	22	48	0	151	5	1	4	762	108	4.03	1.213	8.6	1.1	2.3	7.4	3.15
abae001	SPG	2023	7	3	4.66	55	8	11	0	0	1	48.1	55	30	25	2	11	3	31	1	0	7	208	91	3.26	1.366	10.2	0.4	2	5.8	2.82
abae001	DET	2023	2	1	4.5	25	1	8	0	0	0	44	44	25	22	8	5	0	44	2	0	0	181	89	4.1	1.114	9	1.6	1	9	8.8
abae001	ATL	2023	0	1	6.37	4	3	1	0	0	0	12.1	16	9	9	2	4	0	13	0	0	1	56	69	4.23	1.622	11.7	1.5	2.9	9.5	3.25
abae001	CLE	2023	7	8	3.81	24	24	0	0	0	0	125.1	127	55	53	16	48	0	119	1	0	1	537	109	4.19	1.396	9.1	1.1	3.4	8.5	2.48
abae001	LAD	2023	3	2	5.96	48	0	5	0	0	0	48	43	30	27	6	24	2	49	4	0	3	208	86	4.59	1.396	8.1	1.1	4.5	9.2	2.04
abae001	PHI	2023	0	2	1.74	42	0	12	0	0	10	41.1	30	15	8	3	18	1	64	0	0	3	172	249	2.41	1.561	6.5	0.7	3.9	13.9	3.56
abae001	CHC	2023	2	5	2.67	58	0	38	0	0	22	64	52	33	19	5	13	0	67	5	2	0	253	168	3.02	1.016	7.3	0.7	1.8	9.4	5.15
abae001	TBA	2023	0	0	0	2	0	2	0	0	1	5	2	0	0	0	1	0	2	0	0	0	18	100	3.06	6.6	3.6	0	1.8	3.6	2
abae001	COL	2023	1	6	5.75	17	17	0	0	0	0	81.1	88	53	52	17	32	0	62	7	0	1	354	88	5.89	1.475	9.7	1.9	3.5	6.9	1.94
abae001	TEX	2023	2	1	5.05	26	0	2	0	0	0	35.2	38	20	20	5	14	1	30	1	0	1	154	89	4.66	1.458	9.6	1.3	3.5	7.6	2.14
abae001	ATL	2023	4	0	3.05	35	0	3	0	0	1	35.1	39	14	12	3	9	0	38	0	0	1	141	146	2.09	1.094	7.6	0.8	2.3	9.2	4

player_pitching 6

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:06:33	select * from manager_records LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec
2	19:07:00	select * from players LIMIT 0, 1000	1000 rows returned	0.000 sec / 0.000 sec
3	19:07:34	select * from teams LIMIT 0, 1000	30 rows returned	0.015 sec / 0.000 sec
4	19:07:50	select * from managers LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec
5	19:08:21	select * from player_batting LIMIT 0, 1000	823 rows returned	0.016 sec / 0.000 sec
6	19:08:39	select * from player_pitching LIMIT 0, 1000	963 rows returned	0.016 sec / 0.000 sec

#	Time	Action	Message	Duration / Feat
1	19:06:33	select * from manager_records LIMIT 0, 1000	31 row(s) returned	0.000 sec / 0.000 sec
2	19:07:08	select * from players LIMIT 0, 1000	1000 row(s) returned	0.000 sec / 0.000 sec
3	19:07:34	select * from teams LIMIT 0, 1000	30 row(s) returned	0.015 sec / 0.000 sec
4	19:07:50	select * from managers LIMIT 0, 1000	31 row(s) returned	0.000 sec / 0.000 sec
5	19:08:21	select * from player_battling LIMIT 0, 1000	823 row(s) returned	0.016 sec / 0.000 sec

	Time	Action	Message	Duration / Fetch
1	19:06:33	select - from managers_accounts LIMIT 0, 1000	31 rows(s) returned	0.000 sec / 0.000 sec
2	19:07:00	select - from players LIMIT 0, 1000	1000 rows(s) returned	0.000 sec / 0.000 sec
3	19:07:34	select - from teams LIMIT 0, 1000	30 rows(s) returned	0.015 sec / 0.000 sec
4	19:07:50	select - from managers LIMIT 0, 1000	31 rows(s) returned	0.000 sec / 0.000 sec
5	19:09:21	select - from players_batting LIMIT 0, 1000	823 rows(s) returned	0.016 sec / 0.000 sec
6	19:09:39	select - from players_pitching LIMIT 0, 1000	965 rows(s) returned	0.016 sec / 0.000 sec
7	19:09:56	select - from players_fielding LIMIT 0, 1000	1000 rows(s) returned	0.000 sec / 0.016 sec

#	Time	Action	Message	Duration / Fetch
2	19:07:08	select* from players LIMIT 0, 1000	1000 rows returned	0.001 sec / 0.000 sec
3	19:07:08	select* from teams LIMIT 0, 1000	30 rows returned	0.015 sec / 0.000 sec
4	19:07:50	select* from managers LIMIT 0, 1000	31 rows returned	0.000 sec / 0.000 sec
5	19:08:21	select* from player_batting LIMIT 0, 1000	823 rows returned	0.016 sec / 0.000 sec
6	19:08:30	select* from player_pitching LIMIT 0, 1000	965 rows returned	0.016 sec / 0.000 sec
7	19:08:36	select* from player_batting LIMIT 0, 1000	1000 rows returned	0.000 sec / 0.016 sec
8	19:08:36	select* from player_pitching LIMIT 0, 1000	10 rows returned	0.000 sec / 0.000 sec
9	19:08:36	select* from player_batting LIMIT 0, 1000	30 rows returned	0.000 sec / 0.000 sec

Navigator

Schemas

Filter objects

accountpayable

baseball_stats

Tables

manager_records

managers

player_batting

player_fielding

player_pitching

players

team_batting

team_fielding

team_operations

team_pitching

teams

Views

Stored Procedures

Functions

entertainmentagencyexample

prestigeages

sys

Administration Schemas

Information

Schema: baseball_stats

SQL File 15' x 1

Limit to 1000 rows

1 * select * from team_pitching

Result Grid

Filter Rows

Export

Wrap Cell Content

TeamID	Year	PitchesCount	PitchesAvgGame	Wins	Losses	ERA	Games	GS	GF	CG	Total_Shutout	C_Shutout	Saves	P	H	R	ER	HR	BB	SO	HBP	BK	WP	BF	ERA_plus	FIP	WHIP	HS	HR/9		
ARI	2023	34	28.5	4.7	84	78	4.47	362	362	361	1	9	1	44	1455.1	1375	761	713	197	525	13	1351	48	8	40	6100	98	4.36	1.324	8.6	1.2
ATL	2023	32	28.9	4.42	104	58	4.14	362	362	361	1	15	1	52	1440	1241	738	662	374	14	1536	70	8	38	6135	108	4.1	1.202	8.4	1.2	
BAL	2023	31	28.4	4.19	101	61	3.89	362	362	362	0	12	0	49	1453.2	1334	678	629	177	473	38	1451	63	7	64	6088	106	3.98	1.242	8.3	1.1
BOS	2023	33	30	4.79	78	84	4.52	362	362	362	0	5	0	43	1450	1456	776	738	208	497	21	1423	83	4	49	6168	101	4.37	1.338	8.9	1.3
CHC	2023	27	28.6	4.46	83	79	4.08	362	362	361	1	13	1	35	1453.1	1328	723	651	179	513	5	1377	64	6	37	6085	100	4.36	1.283	8.3	1.1
CHW	2023	32	28.2	5.19	61	101	4.87	362	362	360	2	7	0	28	1451.2	1372	841	774	214	654	14	1470	91	9	65	6201	92	4.71	1.415	8.6	1.3
CIN	2023	40	27.7	5.07	82	80	4.83	362	362	362	0	6	0	53	1438.1	1406	821	772	222	613	13	1381	81	7	48	6310	95	4.79	1.417	8.9	1.4
CLE	2023	39	28.1	4.3	78	86	3.99	362	362	361	1	13	0	47	1444	1353	687	640	175	534	9	1311	51	10	61	6144	105	4.21	1.207	8.4	1.1
COL	2023	34	28.7	5.91	59	105	5.67	362	362	362	0	6	0	32	1454	1598	957	891	234	586	13	1329	86	7	51	6316	89	5.24	1.545	10.2	1.5
DET	2023	32	27.7	4.57	78	84	4.24	362	362	362	0	15	0	41	1442.1	1320	740	680	387	476	8	1374	50	5	51	6075	105	4.13	1.245	8.2	1.2
HOU	2023	34	28.1	4.31	90	72	3.94	362	362	360	2	7	2	42	1445.1	1312	698	632	201	537	6	1460	70	5	37	6110	107	4.31	1.279	8.2	1.3
KCR	2023	36	28.1	5.3	56	106	5.17	362	362	359	3	6	0	28	1489	1429	889	809	207	553	8	1270	73	6	67	6339	86	4.7	1.407	9.1	1.3
LAA	2023	39	28	5.12	73	89	4.64	362	362	361	1	9	1	43	1451.2	1394	829	738	209	636	41	1445	88	8	70	6305	97	4.65	1.418	8.8	1.3
LAD	2023	39	28.1	4.31	100	62	4.58	362	362	362	0	18	0	44	1446.1	1394	899	852	200	494	20	1388	73	4	49	6038	108	4.23	1.202	8	1.2
MIA	2023	32	27.6	4.46	84	78	4.22	362	362	359	3	9	1	43	1453.1	1341	723	673	91	514	20	1490	71	9	38	6091	107	4.13	1.202	8.4	1.2
MIL	2023	34	29.3	3.99	92	70	3.71	362	362	361	1	16	1	46	1443	1318	647	595	198	493	7	1425	60	8	54	5990	116	4.21	1.186	7.6	1.2
MIN	2023	39	29	4.57	87	75	3.87	362	362	360	2	12	2	38	1451.1	1294	659	624	194	445	38	1360	63	1	51	6028	111	3.89	1.197	8	1.2
NYM	2023	37	31.9	4.51	75	87	4.29	362	361	1	7	0	34	1454.2	1333	720	676	390	395	13	1397	85	8	60	6118	99	4.47	1.361	8.5	1.2	
NYG	2023	32	29.1	4.31	82	80	3.97	362	362	359	3	8	3	44	1438.2	1272	698	635	195	508	6	1439	85	15	60	6078	110	4.25	1.236	8	1.2
OKC	2023	41	28	5.7	50	112	5.48	362	362	362	0	5	0	29	1458.2	1464	924	865	213	694	33	1500	100	4	76	6384	75	5.05	1.532	9.3	1.4
PHI	2023	36	29.8	4.41	90	72	4.02	362	362	361	1	4	1	45	1445.1	1317	715	645	385	470	6	1454	54	7	35	6074	107	4	1.239	8.2	1.2
PHX	2023	30	27.6	4.88	76	86	4.6	362	362	360	2	10	2	47	1430	1380	790	731	179	596	25	1363	81	7	57	6238	97	4.4	1.288	8.7	1.1
SDP	2023	30	27.4	4.07	82	80	3.73	362	362	362	0	18	0	38	1441	1270	648	598	174	557	14	1445	76	7	48	6082	110	4.14	1.268	7.9	1.1
SEA	2023	35	27.4	4.07	88	74	3.74	362	362	360	2	18	1	44	1445.1	1300	689	622	384	421	22	1489	57	4	41	6006	109	3.88	1.187	8.1	1.1
SPG	2023	24	30	4.44	79	83	4.02	362	362	358	4	11	2	50	1434.2	1395	719	641	173	403	22	1399	71	12	60	6039	105	3.92	1.253	8.8	1.1

team_pitching 9 x

Output

Action Output

Time Action Message Duration / Fetch

3 19:07:34 select * from teams LIMIT 0, 1000 30 rows returned 0.015 sec / 0.000 sec

4 19:07:50 select * from managers LIMIT 0, 1000 31 rows returned 0.000 sec / 0.000 sec

5 19:08:29 select * from player_batting LIMIT 0, 1000 823 rows returned 0.016 sec / 0.000 sec

6 19:08:39 select * from player_fielding LIMIT 0, 1000 965 rows returned 0.016 sec / 0.000 sec

7 19:08:56 select * from player_pitching LIMIT 0, 1000 1000 rows returned 0.000 sec / 0.016 sec

8 19:09:29 select * from team_batting LIMIT 0, 1000 30 rows returned 0.016 sec / 0.000 sec

9 19:09:47 select * from team_pitching LIMIT 0, 1000 30 rows returned 0.000 sec / 0.000 sec

Navigator

Schemas

Filter objects

accountpayable

baseball_stats

Tables

manager_records

managers

player_batting

player_fielding

player_pitching

players

team_batting

team_fielding

team_operations

team_pitching

teams

Views

Stored Procedures

Functions

entertainmentagencyexample

prestigeages

sys

Administration Schemas

Information

Schema: baseball_stats

SQL File 15' x 1

Limit to 1000 rows

1 * select * from team_fielding

Result Grid

Filter Rows

Export

Wrap Cell Content

TeamID	FieldersCount	RunsAgainstPerGame	DefensiveEff	Games	GS	CG	Innings	Chances	Putsouts	Assists	Errors	DP	Fld_Percent	Rstt	Rstshr	Rdrs	Rdshyr	Rgndr
ARI	53	4.7	0.695	362	1488	1071	12918	5761	4306	1399	56	124	0.99	46	4	43	0	10
ATL	51	4.42	0.685	362	1488	1210	12960	5741	4200	1339	82	134	0.986	34	1	36	0	2
BAL	50	4.19	0.696	362	1488	1100	13083	5876	4361	1444	71	140	0.988	35	3	34	0	-3
BOS	56	4.79	0.677	362	1488	1059	12870	5821	4290	1420	102	137	0.982	-15	-1	-17	-2	-2
CHC	46	4.46	0.694	362	1488	1120	12918	5888	4306	1490	92	137	0.984	4	0	38	0	1
CHW	56	5.19	0.685	362	1488	1080	12885	5639	4295	1249	95	117	0.983	-45	-6	-58	-5	-11
CIN	65	5.07	0.685	362	1488	989	12954	5692	4318	1283	91	125	0.984	-11	-1	-9	-1	1
CLE	50	4.3	0.687	362	1488	1127	12996	5832	4322	1418	82	119	0.986	9	1	25	0	2
COL	57	5.91	0.67	362	1488	1146	12726	5840	4242	1516	82	169	0.986	18	2	21	0	-1
DET	50	4.57	0.699	362	1488	991	12981	5830	4292	1403	100	129	0.983	29	3	23	0	1
HOU	41	4.23	0.687	362	1488	1054	12908	5763	4228	1246	81	144	0.986	22	2	15	0	5
KCR	58	5.3	0.685	362	1488	1081	12681	5698	4227	1391	80	123	0.986	-22	-2	-16	0	3
LAA	66	5.12	0.682	362	1488	1059	12885	5674	4295	1284	95	125	0.983	-66	-6	-1	0	-5
LAD	58	4.31	0.709	362	1488	965	12917	5821	4299	1406	76	139	0.987	37	3	39	0	-2
MIA	52	4.46	0.683	362	1488	1061	12918	5815	4306	1412	97	144	0.983	-26	-2	-7	0	8
MIL	58	3.99	0.719	362	1488	1059	12887	5813	4299	1407	77	117	0.987	63	6	66	4	5
MIN	47	4.57	0.687	362	1488	1024	12862	5796	4294	1286	66	116	0.988	-5	0	23	0	2
NYM	58	4.51	0.689	362	1488	1119	12747	5721	4249	1394	88	142	0.985	-38	-4	-24	-1	2
NYG	54	4.31	0.704	362	1488	1108	12957	5842	4319	1427	96	113	0.984	19	2	25	1	-9
OKC	62	5.7	0.678	362	1488	1046	12777	5830	4299	1289	102	124	0.982	-43	-6	-40	-1	-13
PHI	44	4.41	0.695	362	1488	1104	12981	5804	4237	1385	92	117	0.984	-5	0	-27	0	8
PHX	58	4.88	0.686	362	1488	996	12870	5784	4290	1403	91	125	0.984	-30	-3	6	1	-5
SDP	55	4.0	0.702	362	1488	1142	12969	5840	4322	1444	73	130	0.988	37	3	42	0	3
SEA	55	4.07	0.7	362	1488	1148	13044	5800	4348	1379	73	123	0.987	21	2	12	0	5
SPG	51	4.44	0.679	362	1488	965	12912	6027	4304	1606	117	140	0.981	-35	-3	-17	0	-8
UTL	52	5.13	0.67	362	1488	1109	12933	5844	4301	1392	67	134	0.989	-45	-6	-6	-2	3

team_fielding 10 x

Output

Action Output

Time Action Message Duration / Fetch

4 19:07:50 select * from managers LIMIT 0, 1000 31 rows returned 0.000 sec / 0.000 sec

5 19:08:21 select * from player_batting LIMIT 0, 1000 823 rows returned 0.016 sec / 0.000 sec

6 19:08:39 select * from player_fielding LIMIT 0, 1000 965 rows returned 0.016 sec / 0.000 sec

7 19:08:56 select * from player_pitching LIMIT 0, 1000 1000 rows returned 0.000 sec / 0.016 sec

8 19:09:29 select * from team_batting LIMIT 0, 1000 30 rows returned 0.016 sec / 0.000 sec

9 19:09:47 select * from team_pitching LIMIT 0, 1000 30 rows returned 0.000 sec / 0.000 sec

10 19:10:04 select * from team_fielding LIMIT 0, 1000 30 rows returned 0.000 sec / 0.000 sec

Navigator

Schemas

Filter objects

accountpayable

baseball_stats

Tables

manager_records

managers

player_batting

player_fielding

player_pitching

players

team_batting

team_fielding

team_operations

team_pitching

teams

Views

Stored Procedures

Functions

entertainmentagencyexample

prestigeages

sys

Administration Schemas

Information

Schema: baseball_stats

SQL File 15' x 1

Limit to 1000 rows

1 * select * from team_operations

Result Grid

Filter Rows

Export</

Navigation

Filter objects

baseball_stats

Tables

manager_records

Columns

ManagerID

TeamID

Year

Games

Wins

Losses

Ties

Challenges

Overturned

Ejections

Indexes

Foreign Keys

Triggers

managers

player_batting

player_fielding

player_pitching

players

team_batting

team_fielding

team_operations

team_pitching

teams

views

Stored Procedures

Functions

external

Administration

Schemas

Information

Schema: baseball_stats

SQL File 137

1

Limit to 1000 rows

select * from manager_records

Result Grid

Filter Rows

Export

Wrap Cell Content

ManagerID	TeamID	Year	Games	Wins	Losses	Ties	Challenges	Overturned	Ejections
1	HOU	2023	162	90	72	0	28	18	1
2	MIN	2023	162	87	75	0	34	16	5
3	CIN	2023	162	82	80	0	53	21	7
4	COL	2023	162	59	103	0	38	19	1
5	TEX	2023	162	90	72	0	29	11	4
6	NYG	2023	162	82	80	0	30	18	7
7	TBR	2023	162	99	63	0	55	26	3
8	BOS	2023	162	78	84	0	19	10	4
9	SFG	2023	3	1	2	0	0	0	0
10	MIL	2023	162	92	70	0	29	14	3
11	CLE	2023	162	76	86	0	41	23	3
12	CHW	2023	162	61	101	0	40	16	5
13	DET	2023	162	78	84	0	37	12	2
14	BAL	2023	162	101	61	0	41	17	4
15	SFG	2023	199	79	81	0	46	26	2
16	OAK	2023	162	50	112	0	39	19	6
17	ARI	2023	162	84	78	0	39	26	3
18	STL	2023	162	71	91	0	46	24	6
19	WSN	2023	162	71	91	0	29	22	2
20	SDP	2023	162	82	80	0	39	17	5
21	LAA	2023	162	73	89	0	28	6	4
22	KCR	2023	162	56	106	0	33	21	3
23	LAD	2023	162	100	62	0	39	19	1
24	CHC	2023	162	83	79	0	46	20	5
25	TOR	2023	162	89	73	0	52	18	2
26	MIA	2023	162	84	78	0	29	21	5

Output

Action Output

1 19:06:33 select * from manager_records LIMIT 0, 1000

Message

31 rows returned

Duration / Fetch

0.000 sec / 0.000 sec