Database Generation

1. The Majority database population is of small-medium size, between 5 and 20 entries, since the NBA is composed of a medium number of teams, with each team having five players and staff. The only tables with a large population of 90-155 are player and employee tables. other tables have been populated with a small size since some services are limited to a small number of providers, or organizations may not want many different services.
2. A list of all relational tables in the database with their respective sizes:

* NBA with 7 entries
* Franchise with 19 entries
* Employee with 155 entries
* Player with 90 entries
* Coach with 18 entries
* Staff with 20 entries
* Owner with 18 entries
* Referee with 9 entries
* BroadcastTeam with 18 entries
* Company with 18 entries
* Sponsors with 18 entries
* Service with 7 entries
* SeasonTicket with 7 entries
* SeasonPass with 8 entries
* StreamingService with 6 entries
* Seasons with 13 entries

1. The data was first typed in CSV (comma-separated values) inside a Word document that would later be inputted into SQLite with the CSV mode. This simplified the creation of separate scripts for each table since all was done in a single file.

Here is the CSV-typed data we used:

TaxID

1

2

3

4

5

6

7

city,state,numChampionships,teamName,FKNBA

Los Angeles,CA,3,Lakers,1

San Francisco,CA,7,Warriors,1

Dallas,TX,4,Mavericks,1

Chicago,IL,6,Bulls,1

Philadelphia,PA,0,76ers,1

Boston,MA,1,Celtics,1

New York,NY,1,Knicks,1

Brooklyn,NY,0,Nets,1

Cleveland,OH,3,Cavaliers,1

Houston,TX,0,Rockets,1

San Antonio,TX,2,Spurs,1

Salt Lake City,UT,0,Jazz,1

Milwaukee,WI,0,Bucks,1

Indianapolis,IN,0,Pacers,1

Denver,CO,2,Nuggets,1

Portland,OR,0,Trailblazers,1

Miami,FL,2,Heat,1

Phoenix,AZ,0,Suns,1

N/A,N/A,0,NBA,1

employeeID,dateOfBirth,firstName,lastName,sex,FKNBATaxID,FKTeam

1,1999-02-28,Luka,Doncic,male,1,Mavericks

2,1992-03-23,Kyrie,Irving,male,1,Mavericks

3,2000-02-11,Josh,Green,male,1,Mavericks

4,1998-05-04,Grant,Williams,male,1,Mavericks

5,1991-10-17,Dwight,Powell,male,1,Mavericks

6,1959-07-31,Mark,Cuban,male,1,Mavericks

7,1997-02-11,Joshua,Velasquez,male,1,Mavericks

8,1973-01-20,Jason,Kidd,male,1,Mavericks

9,1998-02-14,Lisa,Cari,female,1,Mavericks

10,1983-07-27,Zack,LaVine,male,1,Bulls

11,1982-04-14,DeMar,DeRozan,male,1,Bulls

12,1982-02-16,Coby,White,male,1,Bulls

13,1980-03-23,Lonzo,Ball,male,1,Bulls

14,1990-01-20,Nikola,Vucevic,male,1,Bulls

15,1936-09-17,Jerry,Reinsdorf,male,1,Bulls

16,1965-07-20,Billy,Donovan,male,1,Bulls

17,1991-01-20,Jennifer,Smith,female,1,Bulls

18,1984-12-30,LeBron,James,male,1,Lakers

19,1980-01-21,Anthony,Davis,male,1,Lakers

20,1985-05-10,Gabe,Vincent,male,1,Lakers

21,1992-07-20,D’Angelo,Russell,male,1,Lakers

22,1990-01-31,Colin,Castleton,male,1,Lakers

23,1995-11-13,John,Jones,male,1,Lakers

24,1994-10-12,Anna,Mejia,female,1,Lakers

25,1973-03-17,Darvin,Ham,male,1,Lakers

26,1956-12-02,Johnny,Buss,male,1,Lakers

27,2000-02-28,Tyrese,Haliburton,male,1,Pacers

28,2001-06-19,Bennedict,Mathurin,male,1,Pacers

29,1998-03-04,Obi,Toppin,male,1,Pacers

30,2000-01-16,Andrew,Nembhard,male,1,Pacers

31,1992-12-17,Myles,Turner,male,1,Pacers

32,1994-02-22,Devonte,Graham,male,1,Spurs

33,2000-05-24,Keldon,Johnson,male,1,Spurs

34,2002-05-20,Jeremy,Sochan,male,1,Spurs

35,1998-11-04,Victor,Wembanyama,male,1,Spurs

36,1999-10-28,Charles,Bediako,male,1,Spurs

37,1994-08-25,Caris,LeVert,male,1,Cavaliers

38,1996-05-15,sam,Merrill,male,1,Cavaliers

39,1999-09-24,Isaiah,Mobley,male,1,Cavaliers

40,1993-06-17,Damian,Jones,male,1,Cavaliers

41,2000-01-26,Darius,Garland,male,1,Cavaliers

42,1988-03-14,Stephen,Curry,male,1,Warriors

43,1986-06-30,Klay,Thompson,male,1,Warriors

44,2001-11-18,Andrew,Wiggins,male,1,Warriors

45,1991-04-07,Chris,Paul,male,1,Warriors

46,1990-10-28,Draymon,Green,male,1,Warriors

47,1981-04-15,Giannis,Antetokounmpo,male,1,Bucks

48,1990-08-31,Damian,Lillard,male,1,Bucks

49,2000-12-04,Jae,Crowder,male,1,Bucks

50,1991-08-11,Robin,Lopez,male,1,Bucks

51,1982-02-28,Andre,Jackson,male,1,Bucks

52,1985-07-22,Joel,Embiid,male,1,76ers

53,1989-09-34,Tyrese,Maxey,male,1,76ers

54,2002-05-10,Robert,Covington,male,1,76ers

55,1989-04-07,Patrick,Beverley,male,1,76ers

56,1984-02-13,Mo,Bamba,male,1,76ers

57,1987-07-30,Jayson,Tatum,male,1,Celtics

58,1983-01-03,Kristaps,Porzingis,male,1,Celtics

59,1999-02-20,Jrue,Holiday,male,1,Celtics

60,1995-04-19,Derrick,White,male,1,Celtics

61,1990-09-21,Luke,Kornet,male,1,Celtics

62,1980-05-12,Jalen,Brunson,male,1,Knicks

63,1982-07-17,Julius,Randle,male,1,Knicks

64,1997-11-20,Evan,Fournier,male,1,Knicks

65,1996-06-29,Donte,DiVincenzo,male,1,Knicks

66,1993-08-14,Isaiah,Hartenstein,male,1,Knicks

67,1996-10-04,Ben,Simmons,male,1,Nets

68,1987-01-25,Mikal,Bridges,male,1,Nets

69,1998-06-26,Cam,Thomas,male,1,Nets

70,1996-03-27,Cameron,Johnson,male,1,Nets

71,1992-09-23,Nic,Claxton,male,1,Nets

72,1981-03-16,Jalen,Green,male,1,Rockets

73,1993-05-24,Dillon,Brooks,male,1,Rockets

74,1994-08-21,Alperen,Sengun,male,1,Rockets

75,1997-03-08,Fred,VanVleet,male,1,Rockets

76,1995-04-26,Amen,Thompson,male,1,Rockets

77,1984-08-12,Lauri,Markkanen,male,1,Jazz

78,1986-04-08,Jordan,Clarkson,male,1,Jazz

79,1992-06-15,John,Collins,male,1,Jazz

80,1993-03-16,Omer,Yurtseven,male,1,Jazz

81,1990-01-24,Keyonte,George,male,1,Jazz

82,2001-07-01,Nikola,Jokic,male,1,Nuggets

83,1983-04-09,Jamal,Murray,male,1,Nuggets

84,1994-02-22,Michael,Porter,male,1,Nuggets

85,1995-05-04,Aaron,Gordon,male,1,Nuggets

86,1990-05-25,Julian,Strawther,male,1,Nuggets

87,2000-06-15,Scoot,Henderson,male,1,Trailblazers

88,2001-03-13,Deandre,Ayton,male,1,Trailblazers

89,1999-08-18,Jerami,Grant,male,1,Trailblazers

90,1996-10-29,Kris,Murray,male,1,Trailblazers

91,1998-10-21,Malcolm,Brogdon,male,1,Trailblazers

92,1988-04-25,Jimmy,Butler,male,1,Heat

93,1993-03-19,Tyler,Herro,male,1,Heat

94,1995-02-27,Jaime,Jaquez,male,1,Heat

95,1997-01-14,Nikola,Jovic,male,1,Heat

96,1994-05-27,Bam,Adebayo,male,1,Heat

97,2000-05-30,Devin,Booker,male,1,Suns

98,2000-03-18,Kevin,Durant,male,1,Suns

99,1996-03-27,Bradley,Beal,male,1,Suns

100,1995-07-14,Jusuf,Nurkic,male,1,Suns

101,1993-08-23,Drew,Eubanks,male,1,Suns

102,1973-06-21,Frank,Vogel,male,1,Suns

103,1968-09-05,Mat,Ishbia,male,1,Suns

104,1970-11-01,Erik,Spoelstra,male,1,Heat

105,1949-06-29,Micky,Arison,male,1,Heat

106,1976-09-25,Chauncey,Billups,male,1,Trailblazers

107,1959-02-03,Jody,Allen,female,1,Trailblazers

108,1971-09-15,Michael,Malone,male,1,Nuggets

109,1947-06-29,Stan,Kroenke,male,1,Nuggets

110,1988-01-21,William,Hardy,male,1,Jazz

111,1978-06-28,Ryan,Smith,male,1,Jazz

112,1977-08-09,Ime,Udoka,male,1,Rockets

113,1957-03-15,Tilman,Fertitta,male,1,Rockets

114,1975-02-11,Jacque,Vaughn,male,1,Nets

115,1964-01-21,Joe,Tsai,male,1,Nets

116,1958-01-17,Tom,Thibodeau,male,1,Knicks

117,1955-05-11,James,Dolan,male,1,Knicks

118,1988-06-30,Joe,Mazzulla,male,1,Celtics

119,1960-05-22,Kevin,Banks,male,1,Celtics

120,1967-07-24,Nick,Nurse,male,1,76ers

121,1964-12-12,Joshua,Harris,male,1,76ers

122,1974-07-04,Adrian,Griffin,male,1,Bucks

123,1961-10-30,Wesley,Edens,male,1,Bucks

124,1965-09-27,Steven,Kerr,male,1,Warriors

125,1956-01-10,Joe,Lacob,male,1,Warriors

126,1979-03-10,John,Bickerstaff,male,1,Cavaliers

127,1962-01-17,Dan,Gilbert,male,1,Cavaliers

128,1949-01-28,Gregg,Popovich,male,1,Spurs

129,1957-02-25,Peter,John,male,1,Spurs

130,1959-10-27,Rick,Carlisle,male,1,Pacers

131,1934-10-23,Herbert,Simon,male,1,Pacers

132,1998-04-15,Ariana,Lawnsford,female,1,Suns

133,1989-09-17,Ned,Oscar,male,1,Heat

134,1990-05-19,Maria,Florence,female,1,Trailblazers

135,1991-02-15,Mathew,Conner,male,1,Nuggets

136,1990-09-20,Dora,Perez,female,1,Jazz

137,1998-11-30,Steve,Cob,male,1,Rockets

138,1994-08-19,Grace,Moore,female,1,Nets

139,1995-05-17,Melody,Norm,female,1,Knicks

140,1985-01-07,Tom,Cruise,male,1,Celtics

141,1998-10-03,Gregg,Ovidiou,male,1,76ers

142,1984-09-01,Shelly,Vasquez,female,1,Bucks

143,1975-04-02,Aaron,Bain,male,1,Warriors

144,1987-12-06,Ivan,Giant,male,1,Cavaliers

145,1984-03-09,Carla,Ford,female,1,Spurs

146,1982-02-18,Frida,Trust,female,1,Pacers

147,1980-06-11,Mat,Wayne,male,1,NBA

148,1985-11-05,Abraham,Crane,male,1,NBA

149,1989-09-18,Le,Yutani,male,1,NBA

150,1984-10-02,Jason,Kennedy,male,1,NBA

151,1979-12-25,Bruce,will,male,1,NBA

152,1990-02-13,Alfred,McAlister,male,1,NBA

153,1984-06-14,Frank,Osborn,male,1,NBA

154,1992-01-24,Terry,Newman,male,1,NBA

155,1996-10-11,Patrick,Isaac,male,1,NBA

Height,rating,rings,FKEmployeeID

77,89,1,1

75,80,0,2

75,85,0,3

72,70,1,4

73,81,0,5

76,80,0,10

77,81,1,11

79,84,1,12

70,73,1,13

72,70,1,14

78,98,5,18

77,94,2,19

71,87,2,20

73,82,1,21

73,76,0,22

75,77,0,27

74,74,0,28

74,87,0,29

77,80,0,30

76,71,0,31

78,72,1,32

75,80,0,33

77,75,0,34

74,74,0,35

73,78,0,36

72,80,1,37

70,79,1,38

75,77,0,39

75,78,1,40

75,73,0,41

72,99,7,42

73,90,3,43

76,87,2,44

77,88,2,45

79,80,1,46

71,76,0,47

72,77,0,48

78,77,0,49

80,73,0,50

71,70,0,51

73,79,1,52

73,72,0,53

75,70,0,54

74,76,1,55

74,71,0,56

83,78,0,57

82,78,1,58

77,74,0,59

75,80,0,60

77,82,1,61

73,73,0,62

72,71,0,63

70,76,0,64

71,77,0,65

71,71,0,66

77,83,0,67

75,80,0,68

72,83,1,69

73,70,0,70

76,76,0,71

77,80,0,72

79,82,0,73

70,77,0,74

72,78,1,75

78,85,2,76

80,82,0,77

71,72,0,78

73,72,0,79

72,74,0,80

75,75,0,81

73,81,1,82

74,80,0,83

83,71,0,84

81,73,0,85

77,77,1,86

75,74,0,87

77,76,0,88

74,76,0,89

73,79,0,90

72,83,0,91

70,84,1,92

71,80,0,93

76,74,0,94

77,70,0,95

72,71,0,96

73,74,0,97

76,73,0,98

77,72,0,99

79,70,0,100

71,78,1,101

role,FKEmployeeID

Trainer,7

Marketing,9

Physiotherapist,17

Trainer,23

Lawyer,24

Marketing,132

Scout,133

Physician,134

Marketing,135

Physician,136

Manager,137

Scout,138

Lawyer,139

Trainer,140

Manager,141

Marketing,142

Trainer,143

Scout,144

Physician,145

Physiotherapist,146

Experience,FKEmployeeID

7,8

5,16

11,25

4,102

12,104

7,106

10,108

3,110

5,112

15,114

12,116

17,118

6,120

7,122

12,124

4,126

6,128

10,130

ownershipYears,FKEmployeeID

20,6

35,15

24,26

36,103

33,105

19,107

39,109

22,111

17,113

28,115

40,117

37,119

32,121

39,123

44,125

26,127

21,129

34,131

numberOfGames,FKEmployeeID

77,147

93,148

73,149

100,150

112,151

140,152

200,153

196,154

121,155

name,teamSize,cameraType,micType,productionSoftware,FKTeamName

MavSide,12,”Canon C200”,”Razer Seiren”,”Premiere Pro”,Mavericks

LiveLakes,7,”Sony FX6”,”HyperX Quadcast”,”Premiere Pro”,Lakers

WarLords,14,”Canon XA60”,”Razer Seiren”,”OBS”,Warriors

BullCamp,10,”Sony FR7”,”Shure MV7”,”Premiere Pro”,Bulls

7Take6,13,”Sony FX3”,”HyperX Quadcast”,”Premiere Pro”,76ers

CelTakes,10,”Canon C200”,”Sony C-80”,”OBS”,Celtics

“Knick Knacks”,19,”Sony FX6”,”Sony ECM-100N”,”OBS”,Knicks

NetWorth,10,”Canon XA60”,”Shure MV7”,”Premiere Pro”,Nets

CavTavern,11,”Panasonic S5”,”Sony ECM-100U”,”OBS”,Cavaliers

RocketTime,7,”Canon R5”,”Razer Seiren”,”Premiere Pro”,Rockets

SpurForward,23,”Sony FX6”,”Sony C-100”,”OBS”,Spurs

JazzClub,11,”Canon C200”,”Shure MV7”,”Premiere Pro”,Jazz

BuckHunt,6,”Panasonic S5”,”Sony ECM-100N”,”OBS”,Bucks

PaceTracker,7,”Canon XA60”,”HyperX Quadcast”,”OBS”,Pacers

NuggetSide,10,”Sony FX3”,”Sony C-100”,”Premiere Pro”,Nuggets

TrailPath,6,”Canon C200”,”Sony C-100”,”OBS”,Trailblazers

Reheat,8,”Panasonic S5”,”Razer Seiren”,”Premiere Pro”,Heat

Eclipse,9,”Sony FR7”,”Sony C-80”,”OBS”,Suns

name,sponsorshipAmount,taxID

Coca-Cola,1000000,1

McDonald’s,3000000,2

Microsoft,5000000,3

Google,4500000,4

Monster Energy,959000,5

Gatorade,2340000,6

Red Bull,2150000,7

X,750000,8

Pepsi,893000,9

In-N-Out,1000000,10

Facebook,2100000,11

Amazon,1980000,12

Netflix,951000,13

Apple,3000000,14

YouTube,915000,15

DoorDash,750000,16

American Express,2003000,17

Nike,4000000,18

FKTax,FKTeam

3,Mavericks

1,Rockets

2,Warriors

18,Lakers

4,Spurs

6,Heat

5,Nuggets

7,Bucks

17,76ers

8,Trailblazers

9,Bulls

16,Nets

10,Jazz

11,Pacers

13,Knicks

12,Suns

14,Cavaliers

15,Celtics

price,taxID,FKNBATaxID

12,1,1

9,2,1

10,3,1

30,4,1

15,5,1

25,6,1

45,7,1

teamName,FKTaxID

Mavericks,5

Bulls,5

Spurs,1

Warriors,6

Lakers,5

Nets,3

Cavaliers,5

Year,FKTaxID

2016,6

2017,6

2018,7

2019,4

2020,5

2021,3

2022,3

2023,6

streamPlatform,FKTaxID

Twitch.TV,1

Amazon Prime Video,1

Apple TV+,3

HBO Max,5

Netflix,5

Peacock,3

playoffs,finals,team1Name,team2Name,gameDate,seasonNum,year,FKNBATaxID

true,false,Bulls,Warriors,2023-3-20,1,2023,1

true,false,Mavericks,Cavaliers,2023-3-21,2,2023,1

true,true,Warriors,Lakers,2024-4-17,3,2024,1

false,false,Nets,Heat,2024-9-01,4,2024,1

false,false,Bucks,Suns,2024-9-05,5,2024,1

false,false,Knicks,Spurs,2024-10-11,6,2024,1

false,false,Lakers,Rockets,2024-10-13,7,2024,1

false,false,Trailblazers,Nuggets,2024-11-26,8,2024,1

true,false,Lakers,Warriors,2025-3-19,9,2025,1

true,false,Pacers,Jazz,2025-3-23,10,2025,1

true,false,76ers,Bulls,2025-4-02,11,2025,1

true,false,Celtics,Mavericks,2025-4-03,12,2025,1

true,true,Mavericks,76ers,2025-4-25,13,2025,1