# Turkish University's American Football League Database

i. Problem Definition

ii. <u>Design</u>

ER Diagram Tables

iii. Implementation

Codes for creating tables
Questions&Answers&Outputs

# **Problem Definition**

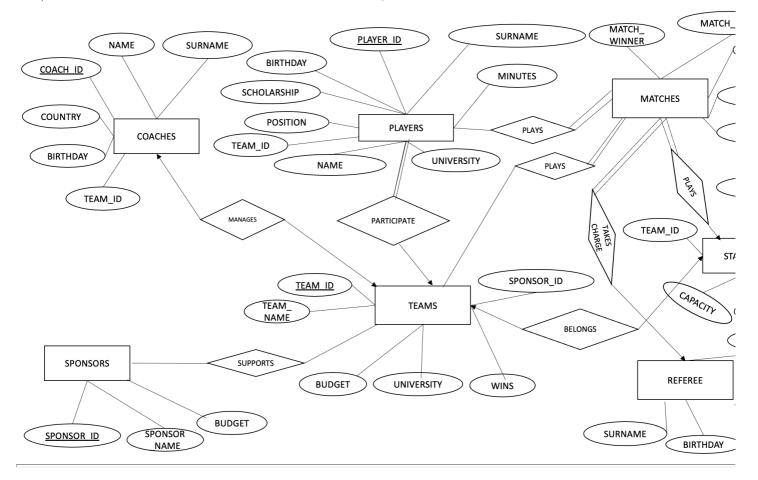
This project aims to create a database for use in the American football league playoffs in Turkish College League. The database will be designed to encompass not only information about university football teams such as stadium, sponsor, and coach details but also player information, statistics, match results, and important data related to match referees. The goal of this project is to establish a foundation for more effective team management, statistical analysis, and overall league performance evaluation in the American college football league. The ultimate objective is to present this information to the public.

#### • Entities

- Players
- Teams
- Coaches
- Matches
- StadiumsReferees
- Sponsors
- · Relations, Properties & Attributes
  - o Primary key for the players' table is PLAYER\_ID. The player table has two relations, one of them is with Matches table and the relation is plays, and the other one is participation relation with teams table. A player can play in multiple matches, and a match can be played by multiple players (many-to-many). Every match must have a player (Total Participation). For Participate relations Each team has multiple players, and each player belongs to a team (one-to-many relation) (Total participation).
  - The Matches table's primary key is MATCH\_ID. The Matches table has 4 relationships. Three of them are plays. A team can play in multiple matches, and a match can be played by multiple teams (many-to-many). Every match must have a team (Total Participation). And this is valid within the stadium table. The fourth relationship is the Takes\_Charge relation. A referee can officiate multiple matches, and a match can be managed by one referee(one-to-many). Each match must have a referee, but a referee is not required to manage a specific match (Total Participation).
  - third table is stadium table. The primary key for this table is STADIUM\_ID. And it has belongs relation between teams table and one-to-one
    relationships because each team has one stadium and each stadium belongs to a team (Total Participation). For Referee table REFEREE\_ID is the
    primary key.
  - Our Teams table has 4 relationship and we already discovered belongs and plays relationships. The other two relationships are Manages and Supports relationships. A team can have multiple sponsors, and a sponsor can sponsor multiple teams. (many-to-many). For the Manages relationship every team must have a coach, and each coach can manage a team(one-to-one). Our sponsors table primary key is SPONSOR\_ID. Our last but not least table is Coaches table. For this table primary key is COACH\_ID.

**DESIGN** 

ER Diagram



**Tables** 

We have 88 rows of data in Players table but we only show 4 of them for the sake of representation. In the other tables we show all of the datas.

	PLAYERS							
PLAYER_ID	NAME	SURNAME	BIRTHDAY	SCHOLARSHIP	POSITION	UNIVERSITY	MINUTES	TEAM_ID
1002	Arda	Özkan	09.12.1998	0	RB	Yeditepe University	52	1
1023	Ahmet	Gümüş	12.09.2005	100	QB	Mersin University	36	2
1045	Erkan	Arıkan	11.20.2000	0	QB	Ege University	47	3
1068	Ercan	Yavuz	08.10.2001	50	В	Özyeğin University	0	4

	TEAMS					
TEAM_ID	TEAM_NAME	UNIVERSITY	SPONSOR_ID	BUDGET	WINS	STADIUM_ID
1	Yeditepe Eagles	Yeditepe University	70	121.000	4	40
4	Özyeğin Wolves	Özyeğin University	73	156.000	5	43
2	Mersin Mustangs	Mersin University	71	68000	3	42
3	Ege Dolphins	Ege University	72	156.000	3	41

COACHES					
COACH_ID	NAME	SURNAME	COUNTRY	BIRTHDAY	TEAM_ID
30	Onur	Durak	Turkey	12.31.1989	1
31	Uluç	Sergün	Turkey	06.03.1986	2
32	Gabe	Fendly	USA	11.13.1965	3
33	Casey	Crosby	USA	11.13.1965	4

	MATCHES						
MATCH_ID	MATCH_SCORE	MATCH_WINNER	STADIUM_ID	REF_ID			
20	27-26	1	42	50			
21	33-15	2	41	51			
22	20-13	2	43	52			
23	24-16	4	40	53			

STADIUM						
STADIUM_ID	CAPACITY	LOCATION	TEAM_ID			
40	2500	İstanbul	1			
41	1000	İzmir	3			
42	4000	Mersin	2			

43 10000 İstanbul 4

SPONSORS					
SPONSOR_ID	SPONSOR_NAME	BUDGET			
70	Başak Gıda	23000			
71	Ciğerci Bahattin	12000			
72	Performist	16000			
73	Fiba banka	35000			

REFEREES					
REFEREE_ID	NAME	SURNAME	BIRTHDAY		
50	BEGÜM	ATILAN	12.10.1970		
51	KEREM	KOÇ	06.19.1985		
52	NAMIK	ARSLAN	02.26.1982		
53	UMUT	ÇANTACI	01.04.1977		
54	SELİM	PAMUK	10.22.1980		

# **IMPLEMENTATION**

#### **Table Creations Codes**

CREATE TABLE PLAYERS (
PLAYER\_ID CHAR(4) NOT NULL,
PLAYER\_NAME VARCHAR(30) NOT NULL,
PLAYER\_SURNAME VARCHAR(30) NOT NULL,
BIRTHDAY DATETIME NOT NULL,
SCHOLARSHIP INTEGER,
POSITION CHAR(2) NOT NULL,
UNIVERSITY VARCHAR(50) NOT NULL,
MINUTES\_INTEGER,
TEAM\_ID VARCHAR(2) NOT NULL,
PRIMARY KEY(PLAYER\_ID))

CREATE TABLE COACHES (
COACH\_ID CHAR(3) NOT NULL,
COACH\_NAME VARCHAR(30) NOT NULL,
COACH\_SURNAME VARCHAR(30) NOT NULL,
COUNTRY VARCHAR(30) NOT NULL,
BIRTHDAY DATETIME NOT NULL,
TEAM\_ID VARCHAR(2) NOT NULL,
PRIMARY KEY(COACH\_ID) )

CREATE TABLE TEAMS (
TEAM\_ID CHAR(2) NOT NULL,
TEAM\_NAME VARCHAR(50) NOT NULL,
UNIVERSITY VARCHAR(50) NOT NULL,
SPONSOR\_ID CHAR(2) NOT NULL,
BUDGET MONEY,
WINS CHAR(2) NOT NULL,
STADIUM\_ID CHAR(2) NOT NULL,
PRIMARY KEY(TEAM\_ID))

CREATE TABLE SPONSORS (
SPONSOR\_ID CHAR(2) NOT NULL,
SPONSOR\_NAME VARCHAR(50),
BUDGET MONEY,
PRIMARY KEY(SPONSOR\_ID) )

CREATE TABLE STADIUMS(
STADIUM\_ID CHAR(2) NOT NULL,
CAPACITY INTEGER,
LOCATION\_VARCHAR(30),
TEAM\_ID CHAR(2) NOT NULL,
PRIMARY KEY(STADIUM\_ID))

CREATE TABLE MATCHES(
MATCH\_ID CHAR(3) NOT NULL,
MATCH\_SCORE VARCHAR(10) NOT NULL,
MATCH\_WINNER\_TEAM\_ID CHAR(2) NOT NULL,
MATCH\_STD\_ID CHAR(2) NOT NULL,
REFEREE\_ID CHAR(2) NOT NULL,
PRIMARY KEY(MATCH\_ID))

CREATE TABLE REFEREES(
REFEREE\_ID CHAR(2) NOT NULL,
REFEREE\_NAME CHAR(30) NOT NULL,
REFEREE\_SURNAME CHAR(30) NOT NULL,
BIRTHDAY DATETIME NOT NULL,
PRIMARY KEY(REFEREE ID))

## Data Entry Codes

INSERT INTO PLAYERS VALUES('1001','Umut','Piranhoğlu','07.05.2000','50','OB','Yeditepe University','22','1'); INSERT INTO PLAYERS VALUES('1003','Kaan','Sarul','04.23.2003','100','RB','Yeditepe University','58','1');
INSERT INTO PLAYERS VALUES('1002','Arda','Özkan','09.12.1998','0','RB','Yeditepe University','52','1'); INSERT INTO PLAYERS VALUES('1004','Irfan','Kılınç','11.08.2001','100','WR','Yeditepe University','30','1'); INSERT INTO PLAYERS VALUES('1005','Umut Ekin','Dogan','01.30.1999','50','OL','Yeditepe University','35','1'); INSERT INTO PLAYERS VALUES('1006','Doğuhan','Aslan','06.17.2004','0','OL','Yeditepe University','3','1'); INSERT INTO PLAYERS VALUES('1007','Sami','Karabıyık','03.19.2002','0','OL','Yeditepe University','7','1'); INSERT INTO PLAYERS VALUES(1007, Salin, Karabiyik, 05.19.2002, 0, OL, Teditepe University', '15', INSERT INTO PLAYERS VALUES('1008', 'Oguz', 'Şekli', '08.28.1998', '0', 'OL', 'Yeditepe University', '56', '1'); INSERT INTO PLAYERS VALUES('1009', 'Ege', 'Acar', '12.14.2005', '0', 'OL', 'Yeditepe University', '40', '1'); INSERT INTO PLAYERS VALUES('1010', 'Baran', 'Kara', '10.02.2003', 0', 'DL', 'Yeditepe University', '37', '1'); INSERT INTO PLAYERS VALUES('1011', 'Ziya', 'Gülal', '05.20.2001', '25', 'DL', 'Yeditepe University', '6', '1');
INSERT INTO PLAYERS VALUES('1012', 'Oğuzhan', 'Çubuk', '02.07.2004', '50', 'DL', 'Yeditepe University', '28', '1');
INSERT INTO PLAYERS VALUES('1013', 'Emre', 'Özbatır', '09.11.2000', '100', 'DL', 'Yeditepe University', '10', '1'); INSERT INTO PLAYERS VALUES('1014', 'Alper', 'Pamukçuoğlu', '07.26.2002', '100', 'LB', 'Yeditepe University', '54', '1'); INSERT INTO PLAYERS VALUES('1015','Yağız','Sayar','04.03.2005','50','LB','Yeditepe University','56','1'); INSERT INTO PLAYERS VALUES('1016', 'Berke', 'Demir', '11.29.1998', '50', 'LB', 'Yeditepe University', '26', '1'); INSERT INTO PLAYERS VALUES('1017', 'Uygar', 'Bolat', '03.15.2003', '0', 'CB', 'Yeditepe University', '38', '1'); INSERT INTO PLAYERS VALUES('1018','Diyar','Ince','06.22.2004','0','CB','Yeditepe University','4','1');
INSERT INTO PLAYERS VALUES('1019','Paşa','Atılan','01.06.1999','0','CB','Yeditepe University','30','1'); INSERT INTO PLAYERS VALUES('1020', 'Görkem', 'Sen', '10.18,2001', '0', 'CB', 'Yeditepe University', '6', '1'); INSERT INTO PLAYERS VALUES('1021','Alp','Taş','08.05.2001','0','CB', Yeditepe University','29','1');
INSERT INTO PLAYERS VALUES('1021','Alp','Taş','08.05.2000','25','SF','Yeditepe University','29','1');
INSERT INTO PLAYERS VALUES('1022','Egehan','Erdoğan','05.13.2000','25','SF','Yeditepe University','33','1');
INSERT INTO PLAYERS VALUES('1023','Ahmet','Gümüş','12.09.2005','100','QB','Mersin University','36','1');
INSERT INTO PLAYERS VALUES('1024','Mehmet','Aydın','02.24.2003','100','RB','Mersin University','15','2');
INSERT INTO PLAYERS VALUES('1025','Mustafa','Demir','07.01.2001','50','WR','Mersin University','6','2'); INSERT INTO PLAYERS VALUES('1026','Ali','Şahin','04.08.2004','50','QB','Mersin University','39','2'); INSERT INTO PLAYERS VALUES('1027', 'Emre', 'Aksoy', '09.16.1998', '25', 'OL', 'Mersin University', '18', '2');
INSERT INTO PLAYERS VALUES('1028', 'Cem', 'Gür', '11.27.2002', '25', 'OL', 'Mersin University', '60', '2'); INSERT INTO PLAYERS VALUES('1029', 'Kerem', 'Öztürk', '06.14.2005', '25', 'OL', 'Mersin University', '41', '2'); INSERT INTO PLAYERS VALUES('1030', 'Baış', 'Yüksel', '03.21.2000', '0', 'OL', 'Mersin University', '58', '2'); INSERT INTO PLAYERS VALUES('1031', 'Can', 'Çetin', '10.04.2004', '0', 'CB', 'Mersin University', '27', '2');
INSERT INTO PLAYERS VALUES('1032', 'Burak', 'Arslan', '07.19.1999', '0', 'DL', 'Mersin University', '53', '2'); INSERT INTO PLAYERS VALUES('1033', Kaan', Karahan', '02.09.2003', 100', 'DL', 'Mersin University', '34', '2'); INSERT INTO PLAYERS VALUES('1034', 'Serkan', 'Kaya', '05.26.2001', '100', 'DL', 'Mersin University', '22', '2'); INSERT INTO PLAYERS VALUES('1035', 'Onur', 'Tekin', '12.02.2005', '50', 'DL', 'Mersin University', '46', '2'); INSERT INTO PLAYERS VALUES('1036', 'Eren', 'Yıldırım', '108.11.2000', '50', 'LB', 'Mersin University', '42', '2');
INSERT INTO PLAYERS VALUES('1037', 'Koray', 'Korkmaz', '04.18.2002', '50', 'LB', 'Mersin University', '11', '2');
INSERT INTO PLAYERS VALUES('1038', 'Mert', 'Atalay', '10.23.1998', '50', 'LB', 'Mersin University', '18', '2'); INSERT INTO PLAYERS VALUES ('1039', Selim', 'Doğan', '03.01.2004', '25', 'CB', 'Mersin University', '8', 2'); INSERT INTO PLAYERS VALUES('1040', Volkan', 'Gültekin', '06.15.2003', '25', 'CB', 'Mersin University', '47', '2'); INSERT INTO PLAYERS VALUES('1041', 'Taylan', 'Graskin', '01.05.2001', '50', 'CB', 'Mersin University', '54', '2'); INSERT INTO PLAYERS VALUES('1042', 'Hakan', 'Koçak', '09.12.2004', '100', 'CB', 'Mersin University', '25', '2'); INSERT INTO PLAYERS VALUES('1043', 'Berkay', 'Özdemir', '07.30.1999', '100', 'WR', 'Mersin University', '12', '2'); INSERT INTO PLAYERS VALUES('1044','Deniz','Yıldız','04.07.2002','100','SF','Mersin University','42','2'); INSERT INTO PLAYERS VALUES('1045', 'Erkan', 'Arıkan', '11.20.2000', '0', 'QB', 'Ege University', '47', '3'); INSERT INTO PLAYERS VALUES('1046','Umut','Taşkım','06.27.2005','0','RB','Ege University','50','3'); INSERT INTO PLAYERS VALUES('1047', 'Furkan', 'Kocaman', '03.14.1999', '0', 'WR', 'Ege University', '2', '3'); INSERT INTO PLAYERS VALUES('1048','Oğuzhan','Ayhan','08.25.2003','25','WR','Ege University','57','3'); INSERT INTO PLAYERS VALUES('1049', Yusuf', 'Karakaş', '05.02.2004', '75', 'OL', 'Ege University', '41', '3'); INSERT INTO PLAYERS VALUES('1050', 'Levent', 'Gök', '12.09.2001', '75', 'OL', 'Ege University', '50', '3'); INSERT INTO PLAYERS VALUES('1051', 'Selçuk', 'Demirtaş', '10.22.2002', '75', 'OL', 'Ege University', '38', '3'); INSERT INTO PLAYERS VALUES('1052','Berk','Savaş','07.06.1998','50','OL','Ege University','49','3'); INSERT INTO PLAYERS VALUES('1053', 'Samet', 'Aksoy', '01.18.2005', '25', 'OL', 'Ege University', '5', '3'); INSERT INTO PLAYERS VALUES('1054', 'Engin', 'Akgün', '04.03.2000', '100', 'DL', 'Ege University', '34', '3'); INSERT INTO PLAYERS VALUES('1055', 'Uğur', 'Akım', '11.10.2003', '0', 'DL', 'Ege University', '52', '3'); INSERT INTO PLAYERS VALUES(1055', 'Mete', 'Şen', '09.26.1998', '0', 'DL', 'Ege University', '33', '3'); INSERT INTO PLAYERS VALUES('1057', 'Metin', 'Eren', '05.08.2002', '100', 'SF', 'Ege University', '29', '3'); INSERT INTO PLAYERS VALUES('1058', 'Oktay', 'Aksoy', '12.16.2004', '50', 'LB', 'Ege University', '22', '3'); INSERT INTO PLAYERS VALUES('1059', 'Arda', 'Çelik', '08.29.1999', '75', 'LB', 'Ege University', '52', '3'); INSERT INTO PLAYERS VALUES('1060', 'Ege', 'Güler', '02.03.2001', '25', 'LB', 'Ege University', '22', '3'); INSERT INTO PLAYERS VALUES('1061','Furkan','Gür','07.20.2003','50','LB','Ege University','4','3'); INSERT INTO PLAYERS VALUES('1062', 'Onurcan', 'Yavuz', '10.06.1998', '50', 'CB', 'Ege University', '58', 3'); INSERT INTO PLAYERS VALUES('1063','Alper','Kılıç','06.01.2004','50','CB','Ege University','32','3'); INSERT INTO PLAYERS VALUES('1064', Murat', 'Taşkın', '03.14.2002', '100', 'CB', 'Ege University', '50', '3'); INSERT INTO PLAYERS VALUES('1065', 'Gökhan', 'Duran', '11.25.2000', '0', 'WR', 'Ege University', '58', '3'); INSERT INTO PLAYERS VALUES('1066','Korhan','Erdoğan','09.07.2005','75','SF','Ege University','5','3'); INSERT INTO PLAYERS VALUES('1067', Erhan', 'Aslan', '04.22.1999', '100', 'QB', 'Özyeğin University', '2', '4'); INSERT INTO PLAYERS VALUES('1068', 'Ercan', 'Yavuz', '08.10.2001', '50', 'B', 'Özyeğin University', '0', '4'); INSERT INTO PLAYERS VALUES('1069', 'Cihan', 'Kılıç', '05.04.2004', '25', 'WR', 'Özyeğin University', '32', '4'); INSERT INTO PLAYERS VALUES('1070', 'Tuncay', 'Demirtaş', '01.13.2003', '0', 'WR', 'Özyeğin University', '4', '4'); INSERT INTO PLAYERS VALUES('1071','Tolga','Çelik','10.31.1998','0','OL','Özyeğin University','55','4'); INSERT INTO PLAYERS VALUES('1072', 'Hüseyin', 'Kocaman', '07.17.2005', '0', 'OL', 'Özyeğin University', '30', '4'); INSERT INTO PLAYERS VALUES('1073', 'Serhat', 'Taşkın', '02.26.2000', '50', 'OL', 'Özyeğin University', '55', '4'); INSERT INTO PLAYERS VALUES('1074', 'Caner', 'Çetin', '06.09.2002', '75', 'RB', 'Özyeğin University', '55', '4'); INSERT INTO PLAYERS VALUES('1075', 'Kaan', 'Akün', '09.19.1999', '100', 'OL', 'Özyeğin University', '37', '4');

INSERT INTO PLAYERS VALUES('1076', 'Emirhan', 'Yavuz', '04.02.2003', '100', 'DL', 'Özyeğin University', '16', '4'); INSERT INTO PLAYERS VALUES('1077', 'Halil', 'Gürsoy', '11.11.2004', '75', 'DL', 'Özyeğin University', '46', '4'); INSERT INTO PLAYERS VALUES('1078', 'Burahan', 'Şen', '08.28.2001', '25', 'DL', 'Özyeğin University', '52', '4'); INSERT INTO PLAYERS VALUES('1079', 'Ramazan', 'Taşkın', '12.05.1998', '0', 'OL', 'Özyeğin University', '17', '4'); INSERT INTO PLAYERS VALUES('1080', 'İbrahim', 'Güler', '07.21.2000', '100', 'LB', 'Özyeğin University', '17', '4'); INSERT INTO PLAYERS VALUES('1081', 'Fatih', 'Güneş', '02.14.2005', '25', 'LB', 'Özyeğin University', '22', '4'); INSERT INTO PLAYERS VALUES('1082', 'Yunus', 'Yalçın', '05.08.1999', '75', 'LB', 'Özyeğin University', '50', '4'); INSERT INTO PLAYERS VALUES('1084', 'Murat', 'Koçak', '10.30.2001', '0', 'WR', 'Özyeğin University', '50', '4'); INSERT INTO PLAYERS VALUES('1085', 'İsmail', 'Çakır', '06.12.2003', '0', 'CB', 'Özyeğin University', '45', '4'); INSERT INTO PLAYERS VALUES('1086', 'Abdullah', 'Çetin', '06.12.2003', '0', 'CB', 'Özyeğin University', '13', '4'); INSERT INTO PLAYERS VALUES('1088', 'Bilge', 'Yıldız', '09.17.1998', '25', 'WR', 'Özyeğin University', '31', '4'); INSERT INTO PLAYERS VALUES('1088', 'Selim', 'Güneş', '07.04.2004', '0', 'SF', 'Özyeğin University', '31', '4'); INSERT INTO PLAYERS VALUES('1088', 'Selim', 'Güneş', '07.04.2004', '0', 'SF', 'Özyeğin University', '16', '4');

INSERT INTO TEAMS VALUES('1', 'Yeditepe Eagles', 'Yeditepe University', '70', '121000', '4', '40'); INSERT INTO TEAMS VALUES('4', 'Özyeğin Wolves', 'Özyeğin University', '73', '156000', '5', '43'); INSERT INTO TEAMS VALUES('2', 'Mersin Mustangs', 'Mersin University', '71', '68000', '3', '42'); INSERT INTO TEAMS VALUES('3', 'Ege Dolphins', 'Ege University', '72', '84000', '3', '41');

INSERT INTO COACHES VALUES('30','Onur','Durak','Turkey','12.31.1989','1'); INSERT INTO COACHES VALUES('31','Uluç','Sergün','Turkey','06.03.1986','2'); INSERT INTO COACHES VALUES('32','Gabe','Fendly','USA','08.24.1970','3'); INSERT INTO COACHES VALUES('33','Casey','Crosby','USA','11.13.1965','4');

INSERT INTO SPONSORS VALUES('70','Başak Gıda','23000'); INSERT INTO SPONSORS VALUES('71','Ciğerci Bahattin','12000'); INSERT INTO SPONSORS VALUES('72','Performist','16000'); INSERT INTO SPONSORS VALUES('73','Fiba banka','35000');

INSERT INTO STADIUMS VALUES('40','2500','İstanbul','1'); INSERT INTO STADIUMS VALUES('41','1000','İzmir','3'); INSERT INTO STADIUMS VALUES('42','4000','Mersin','2'); INSERT INTO STADIUMS VALUES('43','10000','İstanbul','4');

INSERT INTO MATCHES VALUES('20','27-26','1','42','50'); INSERT INTO MATCHES VALUES('21','33-15','2','41','51'); INSERT INTO MATCHES VALUES('22','20-13','2','43','52'); INSERT INTO MATCHES VALUES('23','24-16','4','40','53');

INSERT INTO REFEREES VALUES('50','BEGÜM','ATILAN','12.10.1970'); INSERT INTO REFEREES VALUES('51','KEREM','KOÇ','06.19.1985'); INSERT INTO REFEREES VALUES('52','NAMIK','ARSLAN','02.26.1982'); INSERT INTO REFEREES VALUES('53','UMUT','ÇANTACI','01.04.1977'); INSERT INTO REFEREES VALUES('54','SELIM','PAMUK','10.22.1980');

# Query Questions & Answers

A query that applies a row and column selection to a single table Q1) List names, surnames, and the contries of the coaches who is not from Turkey.

A) SELECT COACH\_NAME, COACH\_SURNAME, COUNTRY FROM COACHES WHERE COUNTRY!='Turkey';

COACH_NAME	COACH_NAME	COACHES
Gabe	Fendly	USA
Casey	Crosby	USA

A query that takes join of two tables and does row and column selection and ordering.

Q2) List the Names, Budget and stadium's location of the teams who has a budget more than 80000.

The list should be ordered with respect to team budgets in descending order.

A) SELECT T.TEAM\_NAME, S.LOCATION\_, T.BUDGET FROM TEAMS T, STADIUMS S WHERE T.STADIUM\_ID=S.STADIUM\_ID AND BUDGET>80000 ORDER BY T.BUDGET DESC;

TEAM_NAME	LOCATION	BUDGET
Özyegin Wolves	Istanbul	156000
Yeditepe Eagles	Istanbul	121000
Ege Dolphins	Izmir	84000

Repeat the previous task but this time your query should take join of three tables
Q3) List the Names, Budget, stadium's location and sponsors of the teams who has a budget more than 80000 and its sponsor budget should
be more than 15000. The list should be ordered with respect to team budgets in descending order.
A) SELECT T.TEAM\_NAME, S.LOCATION\_, T.BUDGET, P.SPONSOR\_NAME FROM TEAMS T, STADIUMS S, SPONSORS P

# WHERE T.STADIUM\_ID=S.STADIUM\_ID AND T.SPONSOR\_ID=P.SPONSOR\_ID AND T.BUDGET>80000 AND P.BUDGET>15000 ORDER BY T.BUDGET DESC;

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TEAM_NAME	LOCATION	BUDGET	SPONSOR_NAME		
Özyegin Wolves	Istanbul	156000	Fiba banka		
Yeditepe Eagles	Istanbul	121000	Basak Gıda		
Ege Dolphins	Izmir	84000	Performist		

Write a query involving outer join and row selection.

Q4) Retrieve the names and universities of all teams along with the sponsor names (if available) from the "TEAMS" and "SPONSORS" tables. Include all teams, even those without sponsors. For the sponsors who has a budget over than 10000

A) SELECT T.TEAM\_NAME, T.UNIVERSITY, S.SPONSOR\_NAME

FROM TEAMS T

LEFT OUTER JOIN SPONSORS S ON T.SPONSOR\_ID = S.SPONSOR\_ID WHERE S.BUDGET > 10000

TEAM_NAME	UNIVERSITY	SPONSOR_NAME
Yeditepe Eagles	Yeditepe University	Basak Gida
Mersin Mustangs	Mersin University	Cigerci Bahattin
Ege Dolphins	Ege University	Performist
Özyegin Wolves	Özyegin University	Fiba banka

Write two queries involving summary functions and row selection and join operations.

Q5) list the total played time for all players in yeditepe university

A) SELECT SUM(P.MINUTES\_) AS TotalMin

FROM PLAYERS P, TEAMS T

WHERE P.TEAM\_ID=T.TEAM\_ID AND T.TEAM\_NAME LIKE 'Yeditepe%'

TotalMin 696

Q6) list the total number of players plays in OL position
A) SELECT COUNT(P.POSITION) AS #ofPosition
FROM PLAYERS P, TEAMS T
WHERE P.TEAM\_ID=T.TEAM\_ID AND P.POSITION='OL'

#ofPosition

Write two queries involving join, grouping, row selection and ordering
Q7)List the average scholarship amount for players and their teams who born after '01-01-2000'. Order alphabetically.
A) SELECT AVG(P.SCHOLARSHIP) AS AVG\_SCHOLARSHIP, T.TEAM\_NAME
FROM PLAYERS P, TEAMS T
WHERE P.TEAM\_ID=T.TEAM\_ID AND P.BIRTHDAY > '01-01-2000'
GROUP BY T.TEAM\_NAME
ORDER BY T.TEAM\_NAME

AVG_SCHOLARSHIP	TEAM_NAME
48	Ege Dolphins
52	Mersin Mustangs
37	Özyegin Wolves
40	Yeditepe Eagles

Q8) List the team name, team budget, total # of players along with their coaches name except Ege Dolphins. List in ascending order according to team budget

A) SELECT COUNT(P.PLAYER\_ID) AS Total#Players, T.TEAM\_NAME, C.COACH\_NAME, T.BUDGET
FROM PLAYERS P, TEAMS T, COACHES C
WHERE P.TEAM\_ID=T.TEAM\_ID AND P.TEAM\_ID=C.TEAM\_ID AND TEAM\_NAME!='Ege Dolphins'
GROUP BY C.COACH\_NAME, T.TEAM\_NAME, T.BUDGET
ORDER BY T.BUDGET

Total#Players	TEAM_NAME	COACH_NAME	BUDGET
21	Mersin Mustangs	Uluç	68000
23	Yeditepe Eagles	Onur	121000
22	Özyegin Wolves	Casey	156000

Write two queries involving join, grouping and group selection

Q9) List the team name, total # of players along with their coaches If the team's total number of players is bigger 22
A) SELECT COUNT(P.PLAYER\_ID) AS Total#Player, T.TEAM\_NAME, C.COACH\_NAME

FROM PLAYERS P, TEAMS T, COACHES C

WHERE P.TEAM\_ID=T.TEAM\_ID AND P.TEAM\_ID=C.TEAM\_ID GROUP BY C.COACH\_NAME, T.TEAM\_NAME

## $HAVING\ COUNT(P.PLAYER\_ID) > 22$

Total#Players	TEAM NAME	COACH_NAME
23	Yeditepe Eagles	Onur

Q10) List team name, total minute played by players in the team whos players played more than or equals to 11 hours

A) SELECT T.TEAM\_NAME, SUM(P.MINUTES\_) AS SumMinutes

FROM TEAMS T, PLAYERS P

WHERE T.TEAM\_ID=P.TEAM\_ID

GROUP BY T.TEAM\_NAME

HAVING SUM(P.MINUTES\_)/60>=11

TEAM NAME	SumMinutes
Ege Dolphins	790
Mersin Mustangs	678
Yeditepe Eagles	696

Write a query involving join, grouping, group selection and row selection

Q11) List the team name and sum of played times for each player if sum of the played time for the players is more than 300 minutes and has more or equal to 50 percent scholarship

A) SELECT T.TEAM\_NAME, SUM(P.MINUTES\_) AS SumMinutes FROM TEAMS T, PLAYERS P
WHERE P.TEAM\_ID=T.TEAM\_ID AND P.SCHOLARSHIP>=50
GROUP BY T.TEAM\_NAME
HAVING SUM(P.MINUTES\_)>300;

TEAM NAME	SumMinutes
Ege Dolphins	464
Mersin Mustangs	366
Yeditepe Eagles	355

Team Members			
Name Surname	Student Number		
Burak Yavuz	20200703013		
Murat Can Bayrak	20180703109		
Umut Piranlıoğlu	20190703028		
Arda Özkan	20190703131		

Go Top