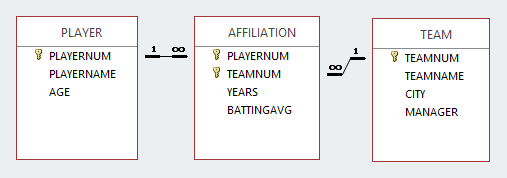
Exam 2 Part 2 - 2020 Fall

1. Consider tables with sample data and the SQL database diagram (not an ER diagram) below for the following questions. Assume the sample data is just part of the records that exist in the database.

(Same database repeated here)



|  |  |  |  |
| --- | --- | --- | --- |
| **TEAMNUM** | **TEAMNAME** | **CITY** | **MANAGER** |
| 10 | Dodgers | Des Moines | Gomez |
| 15 | Giants | Memphis | Carter |
| 23 | Bluebirds | Dallas | Baker |

|  |  |  |  |
| --- | --- | --- | --- |
| **PLAYERNUM** | **TEAMNUM** | **YEARS** | **BATTINGAVG** |
| 1254 | 10 | 8 | 0.325 |
| 1953 | 23 | 4 | 0.256 |
| 1953 | 294 | 3 | 0.289 |
| 1953 | 368 | 2 | 0.261 |
| 2753 | 10 | 5 | 0.319 |
| 2753 | 294 | 1 | 0.251 |

|  |  |  |
| --- | --- | --- |
| **PLAYERNUM** | **PLAYERNAME** | **AGE** |
| 1209 | Marks | 21 |
| 1254 | Gomez | 19 |
| 1536 | Norton | 32 |

1. List player name and age for all players older than 35. Sort by age in ascending order. (5 points)

SELECT

PLAYERNAME,

AGE

FROM

PLAYER

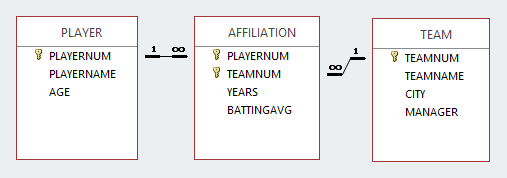
WHERE

AGE > 35

ORDER BY

AGE

(Same database repeated here)



|  |  |  |  |
| --- | --- | --- | --- |
| **TEAMNUM** | **TEAMNAME** | **CITY** | **MANAGER** |
| 10 | Dodgers | Des Moines | Gomez |
| 15 | Giants | Memphis | Carter |
| 23 | Bluebirds | Dallas | Baker |

|  |  |  |  |
| --- | --- | --- | --- |
| **PLAYERNUM** | **TEAMNUM** | **YEARS** | **BATTINGAVG** |
| 1254 | 10 | 8 | 0.325 |
| 1953 | 23 | 4 | 0.256 |
| 1953 | 294 | 3 | 0.289 |
| 1953 | 368 | 2 | 0.261 |
| 2753 | 10 | 5 | 0.319 |
| 2753 | 294 | 1 | 0.251 |

|  |  |  |
| --- | --- | --- |
| **PLAYERNUM** | **PLAYERNAME** | **AGE** |
| 1209 | Marks | 21 |
| 1254 | Gomez | 19 |
| 1536 | Norton | 32 |

1. List every player in the database and their batting average. Ensure the player shows in the list even if, for whatever reason, they are not in the system as part of a team. (8 points)

SELECT

P.PLAYERNAME,

A.BATTINGAVG

FROM

PLAYER P

LEFT JOIN

AFFLLIATION A

ON A.PLAYERNUM = P.PLAYERNUM

1. Answer the following question about database views.
2. One important application of views is to provide a level of indirection or independence when used in database applications. Describe how views are used to provide independence and describe specifically how it can be a benefit. (6 points)

Views are separate from the regular data, and it can be beneficial because provides security.

1. In addition to indirection, list and describe two other purposes for using views. (6 points)

Views hide ugly complicated SQL statements, and they improve security.