Since 2020, Scotland Golfers has maintained a database of every golf club member in Scotland. The database stores details of each player along with the club they are a member of and their handicap.

The database also stores the results of club competitions that take place all over Scotland including a unique code for each individual result and the type of match (Match Play, Stroke Play or Stableford).

Each table contains thousands of rows. A selection of rows from the two database tables are shown below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table: Golfer** | | | | | | |
| **scotGolfNo** | **forename** | **surname** | **age** | **club** | **handicap** |
| 9274632 | Craig | White | Junior | Dundee Golf Club | 12 |
| 8364766 | Donna | Winter | Adult | St Andrews Golf Club | 4 |
| 9364521 | Kai | Smart | Adult | Perth Golf Club |  |
| 1284361 | Kyra | Assam | Junior | Arbroath Golf Club | 5 |
| 7634520 | Jamie | Grey | Senior | Dundee Golf Club | 22 |
| … | … | … | … | … | … |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: Result** | | | | | | | | |
| **resultID** | **competition** | **level** | **type** | **year** | **score** | **scotGolfNo** | **matchType** |
| DUF0022 | Dunfermline Carnegie Cup | Junior | Ladies | 2021 | 91 | 1100752 | stroke play |
| DUN0022 | Dundee Masters | Adult | Mixed | 2021 | 88 | 1154763 | stableford |
| DUN0129 | Dundee Open | Adult | Gents | 2022 | 80 | 1162891 | stroke play |
| HAW0011 | Hawick Seniors | Senior | Ladies | 2021 | 78 | 1465550 | stroke play |
| STA0013 | St Andrews Cup | Adult | Gents | 2021 | 81 | 1162891 | stroke play |
| OBN0007 | Oban Match Play | Adult | Gents | 2021 | 75 | 1307246 | match play |
| … | … |  |  |  | … | … | … |

**For each of the following questions, use the lines provided to write the SQL that would be required to make the described changes to the database tables.**

**Question 1**

A new junior golfer, Eve Muirfoot, has joined Dunfermline Golf Club. After playing a few rounds of golf her handicap is confirmed as 19. She is assigned the golf number 3028756. **(2)**

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**Question 2**

Eve took place in the adult ladies ‘Arbroath Match’ match play competition in 2022, scoring 93. Her result id was OBN0065. **(2)**

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**Question 3**

Aki Seng has joined Hawick Golf Club as an adult member. Aki has yet to be given a handicap. Aki has been told his Scottish Golf Number is 4049875. **(2)**

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**Question 4**

The database is set up with referential integrity. Explain would happen if Eve’s Oban competition result from (question 2) was entered into the Result table before her details were added to the Golfer table (question 1)? **(1)**

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**Question 5**

Having now played enough golf, Aki Seng (scotGolfNo 4049875), has been given a handicap of 26. Scotland Golfers can now add his handicap to the database. **(3)**

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**Question 6**

The results of the 2022, Glasgow Seniors, Gents competition have accidentally been entered as a Mixed event. **(4)**

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**Question 7**

Gull Gott (scotGolfNo 8174089) has given up playing golf and wishes to be removed from the database. **(2)**

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**Question 8**

Sian Breckinridge is found to have cheated in the Dundee Masters competition held in 2021.   
Sian’s result (resultID DUN0020) should be removed from the database. **(2)**  
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**Question 9**

Ray Burns from Dundee Golf Club has had a great year. His handicap went down to 9, plus he got married and changed his surname to Burns-Young. **(5)**  
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**Question 10**

Although unlikely, explain why changing Ray’s data (question 9) may cause an error in the database’s data. **(1)**  
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