

Horse Association Database Documentation

The Horse Association database is a simplified version of a database that might be used by an association of owners of race horses. The tables track owners, horses, and horse race performance information. The tables are populated with a relatively small number of sample data rows.

The database tables are as follows:

OWNER: contains a row for each owner. These owners are all members of the horse association.

HORSE: contains a row for each horse currently registered with the association.

RACE: contains a row for each horse race in which one or more of the horse association's horses competed.

RACE_RESULT: contains a row for each horse entered in each of the races listed in the RACE table.

The following table documents all the table columns.

Table	Column	Description	Data Type	Mandatory?
OWNER	OWNER_ID	Unique ID for the owner; Primary Key	CHAR(5)	Yes
	OWNER_LAST_NAME	The family name of the owner	VARCHAR(15)	Yes
	OWNER_FIRST_NAME	The given name of the owner	VARCHAR(15)	Yes
	OWNER_MIDDLE_INITIAL	The middle initial of the owner	CHAR(1)	No
	STREET_ADDRESS	The street address of the owner (e.g. 123 Main St.)	VARCHAR(25)	Yes
	CITY	The city portion of the owner's mailing address	VARCHAR(15)	Yes
	STATE	The state portion of the owner's mailing address	CHAR(2)	Yes
	ZIPCODE	The postal code portion of the owner's mailing address	CHAR(10)	Yes
	TELEPHONE	The contact telephone number for the owner	CHAR(13)	Yes
HORSE	HORSE_ID	Unique ID for the horse; Primary Key	CHAR(6)	Yes
	HORSE_NAME	The registered name of the horse	VARCHAR(15)	Yes
	OWNER_ID	The ID of the owner of the horse (horses may have only one owner); Foreign Key to OWNER table	CHAR(5)	Yes
	SIRE_HORSE_ID	The HORSE_ID of the father of the horse (if known); Foreign Key to HORSE table (recursive)	CHAR(6)	No
	DAM_HORSE_ID	The HORSE_ID of the mother of the horse (if known); Foreign Key to HORSE table (recursive)	CHAR(6)	No

	BIRTH_DATE	The birth date of the horse	DATE	Yes
	GENDER	The gender of the horse: G = Gelding, M = Mare, S=Stallion	CHAR(1)	Yes
RACE	TRACK_ID	Unique identifier of the track at which the race was run; Primary Key column 1 of 3.	VARCHAR(20)	Yes
	RACE_NUMBER	The number of the race at the track on a particular day. The first race of the day is '1', the second race '2', etc. Primary key column 2 of 3.	CHAR(2)	Yes
	RACE_DATE	The date on which the race took place. Primary key column 3 of 3.	DATE	Yes
	RACE_TIME	The post time for the race in HH:MM format.	CHAR(5)	Yes
	DISTANCE	The length of the in miles.	DECIMAL(3,2)	Yes
	TRACK_CONDITIONS	Code for the track conditions at the time of the race. For example, FD = fast and dry	CHAR(5)	Yes
	PURSE	The total amount of winnings to be divided among the top 3 finishers of the race, in whole dollars.	DECIMA(6,0)	Yes
	ENTRIES	The number of horses entered into the race.	DECIMAL(2,0)	Yes
RACE_RESULT	TRACK_ID	Unique identifier of the track at which the race was run; Primary Key column 1 of 4. TRACK_ID, RACE_NUMBER, and RACE_DATE form the foreign key to the RACE table.	VARCHAR(20)	Yes
	RACE_NUMBER	The number of the race at the track on a particular day. The first race of the day is '1', the second race '2', etc. Primary key column 2 of 4. TRACK_ID, RACE_NUMBER, and RACE_DATE form the foreign key to the RACE table.	CHAR(2)	Yes
	RACE_DATE	The date on which the race took place. Primary key column 3 of 4. TRACK_ID, RACE_NUMBER, and RACE_DATE form the foreign key to the RACE table.	DATE	Yes
	HORSE_ID	The unique identifier of the horse that ran in the race. Primary key column 4 of 4. Many of these HORSE_ID values have matching entries in the HORSE table. However, horses that are not registered with the horse association will not appear in the HORSE table (which means this column cannot be defined as a foreign key).	CHAR(6)	Yes

	PLACE	The finishing position of the horse (1 = first place, 2 = second place, etc.)	DECIMAL(2,0)	No
	PURSE	The amount won by the horse, if any.	DECIMAL(8,2)	No
	LENGTHS_BEHIND	The number of lengths the horse finished behind the winning horse.	DECIMAL(5,2)	No

Here is the physical data model for the Horse Association Database:

