Planes Dataset

Tarefas 1.

**database** pollyana.ferreira@capgemini.com**;**

**show** **table** "marcos.nagato@capgemini.com".planes**;**

**CREATE** **SET** **TABLE** "pollyana.ferreira@capgemini.com".planes ,**NO** **FALLBACK** ,

**NO** **BEFORE** **JOURNAL**,

**NO** **AFTER** **JOURNAL**,

**CHECKSUM** = **DEFAULT**,

**DEFAULT** **MERGEBLOCKRATIO**

(

tailnum VARCHAR(6) CHARACTER **SET** LATIN **NOT** CASESPECIFIC,

ano VARCHAR(4) CHARACTER **SET** LATIN **NOT** CASESPECIFIC,

tipo VARCHAR(24) CHARACTER **SET** LATIN **NOT** CASESPECIFIC COMPRESS ('Fixed wing multi engine','Fixed wing single engine','Rotorcraft'),

manufacturer VARCHAR(29) CHARACTER **SET** LATIN **NOT** CASESPECIFIC COMPRESS ('AIRBUS INDUSTRIE','BOEING','AIRBUS','BOMBARDIER INC','CESSNA','EMBRAER','SIKORSKY','CANADAIR','PIPER','MCDONNELL DOUGLAS','BELL','CIRRUS DESIGN CORP','KILDALL GARY','LAMBERT RICHARD','BARKER JACK L','ROBINSON HELICOPTER CO','GULFSTREAM AEROSPACE','MARZ BARRY','MCDONNELL DOUGLAS AIRCRAFT CO'),

model VARCHAR(14) CHARACTER **SET** LATIN **NOT** CASESPECIFIC,

engines SMALLINT,

seats SMALLINT,

speed VARCHAR(3) CHARACTER **SET** LATIN **NOT** CASESPECIFIC,

engine VARCHAR(13) CHARACTER **SET** LATIN **NOT** CASESPECIFIC COMPRESS ('Turbo-fan','Turbo-jet','Reciprocating','Turbo-prop','Turbo-shaft','4 Cycle'))

**PRIMARY** **INDEX** ( tailnum )**;**

*--Entra no banco de dados*

**database** pollyana.ferreira@capgemini.com**;**

**select** \* **from** planes**;**

Crie a coluna qa\_tailnum e aponte inconsistências da coluna tailnum de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_tailnum VARCHAR(6) CHARACTER **SET** LATIN **NOT** CASESPECIFIC

**;**

M : Indica que está com dado faltante.

**update** planes **set** qa\_tailnum = 'M'

**where** (tailnum **is** **Null**

**or** trim(tailnum) = ''

**or** length(trim(tailnum))= 0

)**;**

S : Indica que não tem exatamente 5 ou 6 caracteres.

**update** planes **set** qa\_tailnum = 'S'

**where** (tailnum) **is** **not** **null**

**and** trim(tailnum) <> ''

**and** (length(trim(tailnum)) < 5

**or** length(trim(tailnum)) > 6

)**;**

FN : Indica que não inicia com a letra "N".

**update** planes **set** qa\_tailnum = **null;**

**update** planes **set** qa\_tailnum = 'FN'

**where** tailnum **not** like 'N%'

**;**

FE : Indica que contém caracteres inválidos ("I", "O", ou 0 como primeiro digito).

**update** planes **set** qa\_tailnum = **null;**

**update** planes **set** qa\_tailnum = 'FE'

**where** substr(tailnum,2,1) = '0'

**or** tailnum like '%o%'

**or** tailnum like '%i%'

**;**

FD : Indica caracteres não numéricos em posições onde tem que haver dígito.

**update** planes **set** qa\_tailnum = 'FD'

**update** planes

**set** qa\_tailnum = 'FD'

**where** TO\_NUMBER(SUBSTRING(tailnum FROM 2 **For** 4)) **is** **null;**

2. Crie a coluna qa\_ano e aponte inconsistências da coluna ano de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_ano VARCHAR(4) CHARACTER **SET** LATIN **NOT** CASESPECIFIC

**;**

M : Indica que não possui informação de ano.

**update** planes **set** qa\_ano = 'M'

**where** (ano **is** **Null**

**or** trim(ano) = ''

**or** to\_number(ano) **is** **null**

)**;**

I : Indica que o valor excede o intervalo [1950,+∞).

**select** \* **from** planes**;**

**update** planes **set** qa\_ano = **null;**

**update** planes **set** qa\_ano = 'I'

**where** ano **>** 1950**;**

3. Crie a coluna qa\_tipo e aponte inconsistências da coluna tipo de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_tipo VARCHAR(24)**;**

M : Indica que está com dado faltante.

**update** planes **set** qa\_tipo = 'M'

**where** (tipo **is** **Null**

**or** trim(tipo) = ''

**or** length(trim(tipo))= 0

)**;**

C : Indica que o valor não pertence a nenhuma categoria esperada:

♣ Fixed wing multi engine

♣ Fixed wing single engine

♣ Rotorcraft

**select** \* **from** planes**;**

**update** planes **set** qa\_tipo = **null;**

**update** planes **set** qa\_tipo = 'C'

**where** tipo **NOT** **IN** ('Fixed wing multi engine', 'Fixed wing single engine', 'Rotorcraft ')

**;**

4. Crie a coluna qa\_manufacturer e aponte inconsistências da coluna manufacturer de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_manufacturer VARCHAR(29)

**;**

M : Indica que está com dado faltante.

**update** planes

**set** qa\_manufacturer = 'M'

**where** (manufacturer **is** **Null**

**or** trim(manufacturer) = ''

**or** length(trim(manufacturer))= 0

**;**

C : Indica que o valor não pertence a nenhuma categoria esperada:

♣ AIRBUS

♣ BOEING

♣ BOMBARDIER

♣ CESSNA

♣ EMBRAER

♣ SIKORSKY

♣ CANADAIR

♣ PIPER

♣ MCDONNELL DOUGLAS

♣ CIRRUS

♣ BELL

♣ KILDALL GARY

♣ LAMBERT RICHARD

♣ BARKER JACK

♣ ROBINSON HELICOPTER

♣ GULFSTREAM

♣ MARZ BARRY

**update** planes **set** qa\_manufacturer = **null;**

**update** planes **set** qa\_manufacturer = 'C'

**where** manufacturer **NOT** **IN** ('AIRBUS', 'BOEING', 'BOMBARDIER', 'CESSNA', 'EMBRAER', 'SIKORSKY', 'CANADAIR', 'PIPER', 'MCDONNELL DOUGLAS',

'CIRRUS', 'BELL', 'KILDALL GARY', 'LAMBERT RICHARD', 'BARKER JACK', 'ROBINSON HELICOPTER', 'GULFSTREAM', 'MARZ BARRY'

)

**;**

5. Crie a coluna qa\_model e aponte inconsistências da coluna model de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_model VARCHAR(14)

**;**

M : Indica que está com dado faltante.

**update** planes

**set** qa\_model = 'M'

**where** (model **is** **Null**

**or** trim(model) = ''

**or** length(trim(model))= 0

)**;**

F : Indica que não respeita o formato esperado

♣ Modelos AIRBUS devem começar com "A"

♣ Modelos BOEING devem começar com "7"

♣ Modelos BOMBARDIER e CANADAIR devem começar com "CL"

♣ Modelos MCDONNELL DOUGLAS devem começar com "MD" ou "DC"

**update** planes

**set** qa\_model = 'F'

**where** (manufacturer like 'AIRBUS' **and** model **not** like 'A%')

**or** (manufacturer like 'BOEING' **and** model **not** like '7%')

**or** (manufacturer like 'BOMBARDIER' **and** model **not** like 'CL%')

**or** (manufacturer like 'CANADAIR' **and** model **not** like 'CL%')

**or** (manufacturer like 'MCDONNELL DOUGLAS' **and** model **not** like 'MD%'

**and** manufacturer like 'MCDONNELL DOUGLAS' **and** model **not** like 'DC%')**;**

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**update** planes **set** qa\_model = 'F'

**where** (manufacturer = 'AIRBUS' **and** substr(model,1,1) <> 'A')

**or** (manufacturer = 'BOEING' **and** substr(model,1,1) <> '7')

**or** (manufacturer **in** ('BOMBARDIER','CANADAIR') **and** substr(model,1,2) <> 'CL')

**or** (manufacturer = 'MCDONNELL DOUGLAS' **and** substr(model,1,2) **not** **in** ('MD','DC'))**;**

6. Crie a coluna qa\_engines e aponte inconsistências da coluna engines de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_engines char(1)**;**

M : Indica que está com dado faltante.

**update** planes **set** qa\_engines = 'M'

**where** (engines **is** **Null**

**or** trim(engines) = ''

**or** length(trim(engines))= 0

)**;**

I : Indica que o valor excede o intervalo [1, 4].

**update** planes **set** qa\_engines = 'I'

**where** (engines) **is** **not** **null**

**and** trim(engines) <> ''

**and** (length(trim(engines)) **not** between 1 and 4

)**;**

7. Crie a coluna qa\_seats e aponte inconsistências da coluna seats de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_seats char(1)**;**

M : Indica que está com dado faltante.

**update** planes **set** qa\_seats = 'M'

**where** (seats **is** **Null**

**or** trim(seats) = ''

**or** length(trim(seats))= 0

)**;**

I : Indica que o valor excede o intervalo [2, 500].

**update** planes **set** qa\_seats = 'I'

**where** (seats) **is** **not** **null**

**and** trim(seats) <> ''

**and** (length(trim(seats)) **not** between 2 and 500

)**;**

8. Crie a coluna qa\_speed e aponte inconsistências da coluna speed de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_speed VARCHAR(3)

**;**

M : Indica que está sem informação de velocidade.

**update** planes

**set** qa\_speed = 'M'

**Where** (speed **is** **null**

**or** speed = '0'

**or** to\_number(speed) **is** **null**

)**;**

I : Indica que o valor excede o intervalo [50, 150].

**update** planes **set** qa\_speed = **null;**

**update** planes **set** qa\_speed = 'I'

**where** to\_number(speed) **not** between 50 and 150

**;**

**select** \* **from** planes**;**

9. Crie a coluna qa\_engine e aponte inconsistências da coluna engine de acordo com as regras abaixo:

**ALTER** **TABLE** planes

**ADD** qa\_engine VARCHAR(13)

M : Indica que está com dado faltante.

**update** planes

**set** qa\_engine = 'M'

**Where** (engine **is** **null**

**or** trim(engine) = ''

)**;**

C : Indica que o valor não pertence a nenhuma categoria esperada:

♣ Turbo-fan

♣ Turbo-jet

♣ Turbo-prop

♣ Turbo-shaft

♣ 4 Cycle

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**create** **table** engine\_cat ( engine\_cat varchar(50) )**;**

**insert** **into** engine\_cat **values** ('Turbo-fan')**;**

**insert** **into** engine\_cat **values** ('Turbo-jet')**;**

**insert** **into** engine\_cat **values** ('Turbo-prop')**;**

**insert** **into** engine\_cat **values** ('Turbo-shaft')**;**

**insert** **into** engine\_cat **values** ('4 Cycle')**;**

**update** planes **set** qa\_engine = 'C'

**where** trim(engine) **not** **in** (**select** trim(engine\_cat)

**from** engine\_cat)**;**