

# Proyecto Base de Datos

Ronin CarrIÓN

# Importación de Archivo

## 2. Normalizar columnas con campos repetitivos

	status
1	Post Production
2	Released
3	Rumored

  

	job
1	Frame Playback
2	2D Artist
3	2D Supervisor
4	3D Animator
5	3D Artist
6	3D Coordinator
7	3D Modeller
8	3D Supervisor

	department
1	Actors
2	Art
3	Camera
4	Costume & Make-Up
5	Crew
6	Directing
7	Editing
8	Lighting
9	Production

```
10    | DROP TABLE IF EXISTS status;
11  ⌈CREATE TABLE status (status VARCHAR(100)) AS SELECT DISTINCT status
12  ⌈FROM movie_dataset.movie_dataset;
13
14  ⌈ALTER TABLE status
15  ⌈ADD PRIMARY KEY (status);
16
17  -- Creación de la relación movie-status
18  ⌈CREATE TABLE status_movie (id INT NOT NULL,
19  ⌈                                status VARCHAR(100))AS SELECT id, st.status AS status
20  ⌈FROM movie_dataset.movie_dataset movie_status, status st
21  ⌈WHERE movie_status.status = st.status;
22
23  ⌈ALTER TABLE status_movie
24  ⌈ADD FOREIGN KEY (id) REFERENCES movie(id),
25  ⌈      ADD FOREIGN KEY (status) REFERENCES status(status);
```

# Eliminación de valores nulos

```
53  DROP TABLE IF EXISTS homepage;
54  CREATE TABLE homepage(homepage VARCHAR(200)) AS
55    SELECT DISTINCT homepage
56    FROM movie_dataset.movie_dataset;
57
58  DELETE
59  FROM homepage
60  WHERE homepage IS NULL;
61
62  ALTER TABLE homepage
63    ADD PRIMARY KEY (homepage);
64
65
66  CREATE TABLE relacion_homepage (id INT NOT NULL PRIMARY KEY, homepage VARCHAR(200)) AS
67    SELECT DISTINCT id, homepage
68    FROM movie_dataset.movie_dataset
69    WHERE homepage != '' OR homepage IS NOT NULL;
70    -- Agregamos las claves foráneas de la relacion_homepage a movie y a homepage según corresponda.
71  ALTER TABLE relacion_homepage
72    ADD FOREIGN KEY (id)
73      REFERENCES movie(id),
74    ADD FOREIGN KEY (homepage)
75      REFERENCES homepage(homepage);
76
```

# Columna con valores redundantes

```
9  -- ----- Normalización de Status -----
10 DROP TABLE IF EXISTS status;
11 CREATE TABLE status (status VARCHAR(100)) AS SELECT DISTINCT status
12 FROM movie_dataset.movie_dataset;
13
14 ALTER TABLE status
15 ADD PRIMARY KEY (status);
16
17 -- Creación de la relación movie-status
18 CREATE TABLE status_movie (id INT NOT NULL,
19                         status VARCHAR(100))AS SELECT id, st.status AS status
20 FROM movie_dataset.movie_dataset movie_status, status st
21 WHERE movie_status.status = st.status;
22
23 ALTER TABLE status_movie
24     ADD FOREIGN KEY (id) REFERENCES movie(id),
25     ADD FOREIGN KEY (status) REFERENCES status(status);
26
```

# Columnas con valores no atómicos

```
341     SELECT id, cast, length(cast) as longitud,
342           length(REPLACE(cast, ' ', '')) as longitudSinEspacios,
343           length(cast) - length(REPLACE(cast, ' ', '')) as CantidadEspacios,
344           length(cast) - length(REPLACE(cast, ' ', '')) + 1 as CantidadDePalabras
345     FROM cast ;
```

	#id	cast	#longitud	#longitudSinEspacios	#CantidadEspacios	#CantidadDePalab...
3891	72766	Edward Burns Kerry Bish\u00f3n Marsha Vietlein Caitlin Fitzg...	88	71	9	10
3892	231617	Eric Mabius Kristin Booth Crystal Lowe Geoff Gustafson Benj...	77	68	9	10
3893	126186	Daniel Henney Eliza Coupe Bill Paxton Alan Ruck Zhu Shimao	58	49	9	10
3894	25975	Drew Barrymore Brian Herzlinger Corey Feldman Eric Roberts ...	72	63	9	10
3895	49529	Taylor Kitsch Lynn Collins Samantha Morton Willem Dafoe Tho...	75	65	10	11
3896	559	Tobey Maguire Kirsten Dunst James Franco Thomas Haden Churc...	73	63	10	11

```
66
67     UPDATE cast
68     SET cast = REPLACE(cast,'Anh Le Guy Pearce', 'Anh Le_Guy Pearce');
69
```

# Columnas Formato Json

```
401 ----- Normalización de spoken Languages -----
402
403 # [{"iso_639_1": "en", "name": "English"}]
404
405 DROP PROCEDURE IF EXISTS spoken_languages;
406 DELIMITER $$ 
407 CREATE PROCEDURE spoken_languages()
408 BEGIN
409     DECLARE done INT DEFAULT FALSE ;
410     DECLARE jsonData json ;
411     DECLARE jsonId varchar(250) ;
412     DECLARE jsonLabel varchar(250) ;
413     DECLARE movieId INT;
414     DECLARE i INT;
415 
```

```
416     -- Declarar el cursor
417     DECLARE myCursor
418         CURSOR FOR
419             SELECT id, JSON_EXTRACT(CONVERT(spoken_languages USING UTF8MB4), '$[*]')
420             FROM movie_dataset.movie_dataset;
421     -- Declarar el handler para NOT FOUND
422
423     DECLARE CONTINUE HANDLER
424         FOR NOT FOUND SET done = TRUE ;
425
426     -- Abrir el cursor
427     OPEN myCursor ;
428     cursorLoop: LOOP
429
430         FETCH myCursor INTO movieId, jsonData;
431         SET i = 0;
432         IF done THEN
433             LEAVE cursorLoop ;
434         END IF ;
```

# Columnas Formato Json

```
436      WHILE(JSON_EXTRACT(jsonData, CONCAT('$[', i, ']')) IS NOT NULL) DO  
437          SET jsonId = IFNULL(JSON_EXTRACT(jsonData, CONCAT('$[', i, '].iso_639_1')), '') ;  
438          SET jsonLabel = IFNULL(JSON_EXTRACT(jsonData, CONCAT('$[', i, '].name')), '') ;  
439          SET @sql_text = CONCAT('INSERT INTO spoken_languages VALUES (' , movieId, ', ' , REPLACE(jsonId,'\'',''), ', ' , jsonLabel, ', ')');  
440  
441          PREPARE stmt FROM @sql_text;  
442          EXECUTE stmt;  
443          DEALLOCATE PREPARE stmt;  
444          SET i = i + 1;  
445      END WHILE;  
446  
447  END LOOP ;  
448  
449  CLOSE myCursor ;  
450  
451 END$$  
452 DELIMITER ;
```

```
542      UPDATE movie_dataset.movie_dataset SET crew = CONVERT (   
543          REPLACE(REPLACE(REPLACE(REPLACE(REPLACE(REPLACE(crew,  
544              ''', '\'''),  
545              '{\''', '{"'),  
546              '\': \'', '\"': '\"'),  
547              '\', \'', '\"', '\"'),  
548              '\': ', '\"': '\"'),  
549              ', \'', ', \"')  
550          USING UTF8mb4 );  
551
```