-- Create Date : 2018-10-01T16:14:41 --

Schema : sakila

Tables

name	comments
actor	
address	
category	
city	
country	
customer	
film	
film_actor	
film_category	
film_text	
inventory	
language	
payment	
rental	
staff	
store	

Views

name
actor_info
customer_list
film_list
nicer_but_slower_film_list
sales_by_film_category
sales_by_store
staff_list

Functions

name	comments
get_customer_balance	
inventory_held_by_customer	
inventory_in_stock	

Procedures

name	comments
film_in_stock	
film_not_in_stock	
rewards_report	Provides a customizable report on best customers

actor

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
actor_id	smallint(5) unsigned	NO		auto_increment	
first_name	varchar(45)	NO			
last_name	varchar(45)	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	actor_id	true
idx_actor_last_name	last_name	false

Create Script

```
CREATE TABLE `actor` (
  `actor_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `first_name` varchar(45) NOT NULL,
  `last_name` varchar(45) NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`actor_id`),
  KEY `idx_actor_last_name` (`last_name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

address

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
address_id	smallint(5) unsigned	NO		auto_increment	
address	varchar(50)	NO			
address2	varchar(50)	YES			
district	varchar(20)	NO			
city_id	smallint(5) unsigned	NO			
postal_code	varchar(10)	YES			
phone	varchar(20)	NO			
location	geometry	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
idx_location	location	false
PRIMARY	address_id	true
idx_fk_city_id	city_id	false

Create Script

```
CREATE TABLE `address` (
  `address_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `address` varchar(50) NOT NULL,
  `address2` varchar(50) DEFAULT NULL,
  `district` varchar(20) NOT NULL,
  `city_id` smallint(5) unsigned NOT NULL,
  `postal_code` varchar(10) DEFAULT NULL,
  `phone` varchar(20) NOT NULL,
  `location` geometry NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`address_id`),
  KEY `idx_fk_city_id` (`city_id`),
  SPATIAL KEY `idx_location` (`location`),
  CONSTRAINT `fk_address_city` FOREIGN KEY (`city_id`) REFERENCES `city` (`city_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

category

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
category_id	tinyint(3) unsigned	NO		auto_increment	
name	varchar(25)	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	category_id	true

Create Script

```
CREATE TABLE `category` (
  `category_id` tinyint(3) unsigned NOT NULL AUTO_INCREMENT,
  `name` varchar(25) NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`category_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

city

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
city_id	smallint(5) unsigned	NO		auto_increment	
city	varchar(50)	NO			
country_id	smallint(5) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	city_id	true
idx_fk_country_id	country_id	false

Create Script

```
CREATE TABLE `city` (
  `city_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `city` varchar(50) NOT NULL,
  `country_id` smallint(5) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`city_id`),
  KEY `idx_fk_country_id` (`country_id`),
  CONSTRAINT `fk_city_country` FOREIGN KEY (`country_id`) REFERENCES `country` (`country_id`) ON
UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

country

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
country_id	smallint(5) unsigned	NO		auto_increment	
country	varchar(50)	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	country_id	true

Create Script

```
CREATE TABLE `country` (
  `country_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `country` varchar(50) NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`country_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

customer

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
customer_id	smallint(5) unsigned	NO		auto_increment	
store_id	tinyint(3) unsigned	NO			
first_name	varchar(45)	NO			
last_name	varchar(45)	NO			
email	varchar(50)	YES			
address_id	smallint(5) unsigned	NO			
active	tinyint(1)	NO	1		
create_date	datetime	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
idx_fk_address_id	address_id	false
idx_last_name	last_name	false
PRIMARY	customer_id	true
idx_fk_store_id	store_id	false

Create Script

```
CREATE TABLE `customer` (
  `customer_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `store_id` tinyint(3) unsigned NOT NULL,
  `first_name` varchar(45) NOT NULL,
  `last_name` varchar(45) NOT NULL,
  `email` varchar(50) DEFAULT NULL,
  `address_id` smallint(5) unsigned NOT NULL,
  `active` tinyint(1) NOT NULL DEFAULT '1',
  `create_date` datetime NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`customer_id`),
  KEY `idx_fk_store_id` (`store_id`),
  KEY `idx_fk_address_id` (`address_id`),
  KEY `idx_last_name` (`last_name`),
  CONSTRAINT `fk_customer_address` FOREIGN KEY (`address_id`) REFERENCES `address` (`address_id`) ON
UPDATE CASCADE,
  CONSTRAINT `fk_customer_store` FOREIGN KEY (`store_id`) REFERENCES `store` (`store_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

film

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
film_id	smallint(5) unsigned	NO		auto_increment	
title	varchar(255)	NO			
description	text	YES			
release_year	year(4)	YES			
language_id	tinyint(3) unsigned	NO			
original_language_id	tinyint(3) unsigned	YES			
rental_duration	tinyint(3) unsigned	NO	3		
rental_rate	decimal(4,2)	NO	4.99		
length	smallint(5) unsigned	YES			
replacement_cost	decimal(5,2)	NO	19.99		
rating	enum('G','PG','PG-13','R','NC-17')	YES	G		
special_features	set('Trailers','Commentaries','Deleted Scenes','Behind the Scenes')	YES			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
idx_title	title	false
idx_fk_language_id	language_id	false
idx_fk_original_language_id	original_language_id	false
PRIMARY	film_id	true

Create Script

```
CREATE TABLE `film` (
  `film_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `title` varchar(255) NOT NULL,
  `description` text,
  `release_year` year(4) DEFAULT NULL,
  `language_id` tinyint(3) unsigned NOT NULL,
  `original_language_id` tinyint(3) unsigned DEFAULT NULL,
  `rental_duration` tinyint(3) unsigned NOT NULL DEFAULT '3',
  `rental_rate` decimal(4,2) NOT NULL DEFAULT '4.99',
  `length` smallint(5) unsigned DEFAULT NULL,
  `replacement_cost` decimal(5,2) NOT NULL DEFAULT '19.99',
  `rating` enum('G','PG','PG-13','R','NC-17') DEFAULT 'G',
  `special_features` set('Trailers','Commentaries','Deleted Scenes','Behind the Scenes') DEFAULT
NULL,
```

```
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`film_id`),
  KEY `idx_title` (`title`),
  KEY `idx_fk_language_id` (`language_id`),
  KEY `idx_fk_original_language_id` (`original_language_id`),
  CONSTRAINT `fk_film_language` FOREIGN KEY (`language_id`) REFERENCES `language` (`language_id`) ON
UPDATE CASCADE,
  CONSTRAINT `fk_film_language_original` FOREIGN KEY (`original_language_id`) REFERENCES `language`
(`language_id`) ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

film_actor

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
actor_id	smallint(5) unsigned	NO			
film_id	smallint(5) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	actor_id,film_id	true
idx_fk_film_id	film_id	false

Create Script

```
CREATE TABLE `film_actor` (
  `actor_id` smallint(5) unsigned NOT NULL,
  `film_id` smallint(5) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`actor_id`,`film_id`),
  KEY `idx_fk_film_id` (`film_id`),
  CONSTRAINT `fk_film_actor_actor` FOREIGN KEY (`actor_id`) REFERENCES `actor` (`actor_id`) ON
UPDATE CASCADE,
  CONSTRAINT `fk_film_actor_film` FOREIGN KEY (`film_id`) REFERENCES `film` (`film_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

film_category

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
film_id	smallint(5) unsigned	NO			
category_id	tinyint(3) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
fk_film_category_category	category_id	false
PRIMARY	film_id,category_id	true

Create Script

```
CREATE TABLE `film_category` (
  `film_id` smallint(5) unsigned NOT NULL,
  `category_id` tinyint(3) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`film_id`,`category_id`),
  KEY `fk_film_category_category` (`category_id`),
  CONSTRAINT `fk_film_category_category` FOREIGN KEY (`category_id`) REFERENCES `category`
(`category_id`) ON UPDATE CASCADE,
  CONSTRAINT `fk_film_category_film` FOREIGN KEY (`film_id`) REFERENCES `film` (`film_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

film_text

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
film_id	smallint(6)	NO			
title	varchar(255)	NO			
description	text	YES			

Indexs

name	columns	isnull
PRIMARY	film_id	true
idx_title_description	title,description	false

Create Script

```
CREATE TABLE `film_text` (
  `film_id` smallint(6) NOT NULL,
  `title` varchar(255) NOT NULL,
  `description` text,
  PRIMARY KEY (`film_id`),
  FULLTEXT KEY `idx_title_description` (`title`,`description`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

inventory

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
inventory_id	mediumint(8) unsigned	NO		auto_increment	
film_id	smallint(5) unsigned	NO			
store_id	tinyint(3) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	inventory_id	true
idx_fk_film_id	film_id	false
idx_store_id_film_id	store_id,film_id	false

Create Script

```
CREATE TABLE `inventory` (
  `inventory_id` mediumint(8) unsigned NOT NULL AUTO_INCREMENT,
  `film_id` smallint(5) unsigned NOT NULL,
  `store_id` tinyint(3) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`inventory_id`),
  KEY `idx_fk_film_id` (`film_id`),
  KEY `idx_store_id_film_id` (`store_id`,`film_id`),
  CONSTRAINT `fk_inventory_film` FOREIGN KEY (`film_id`) REFERENCES `film` (`film_id`) ON UPDATE
CASCADE,
  CONSTRAINT `fk_inventory_store` FOREIGN KEY (`store_id`) REFERENCES `store` (`store_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

language

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
language_id	tinyint(3) unsigned	NO		auto_increment	
name	char(20)	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	language_id	true

Create Script

```
CREATE TABLE `language` (
  `language_id` tinyint(3) unsigned NOT NULL AUTO_INCREMENT,
  `name` char(20) NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`language_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

payment

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
payment_id	smallint(5) unsigned	NO		auto_increment	
customer_id	smallint(5) unsigned	NO			
staff_id	tinyint(3) unsigned	NO			
rental_id	int(11)	YES			
amount	decimal(5,2)	NO			
payment_date	datetime	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
idx_fk_customer_id	customer_id	false
fk_payment_rental	rental_id	false
PRIMARY	payment_id	true
idx_fk_staff_id	staff_id	false

Create Script

```
CREATE TABLE `payment` (
  `payment_id` smallint(5) unsigned NOT NULL AUTO_INCREMENT,
  `customer_id` smallint(5) unsigned NOT NULL,
  `staff_id` tinyint(3) unsigned NOT NULL,
  `rental_id` int(11) DEFAULT NULL,
  `amount` decimal(5,2) NOT NULL,
  `payment_date` datetime NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`payment_id`),
  KEY `idx_fk_staff_id` (`staff_id`),
  KEY `idx_fk_customer_id` (`customer_id`),
  KEY `fk_payment_rental` (`rental_id`),
  CONSTRAINT `fk_payment_customer` FOREIGN KEY (`customer_id`) REFERENCES `customer` (`customer_id`)
ON UPDATE CASCADE,
  CONSTRAINT `fk_payment_rental` FOREIGN KEY (`rental_id`) REFERENCES `rental` (`rental_id`) ON
DELETE SET NULL ON UPDATE CASCADE,
  CONSTRAINT `fk_payment_staff` FOREIGN KEY (`staff_id`) REFERENCES `staff` (`staff_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

rental

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
rental_id	int(11)	NO		auto_increment	
rental_date	datetime	NO			
inventory_id	mediumint(8) unsigned	NO			
customer_id	smallint(5) unsigned	NO			
return_date	datetime	YES			
staff_id	tinyint(3) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	rental_id	true
rental_date	rental_date,inventory_id,customer_id	true
idx_fk_inventory_id	inventory_id	false
idx_fk_customer_id	customer_id	false
idx_fk_staff_id	staff_id	false

Create Script

```
CREATE TABLE `rental` (
  `rental_id` int(11) NOT NULL AUTO_INCREMENT,
  `rental_date` datetime NOT NULL,
  `inventory_id` mediumint(8) unsigned NOT NULL,
  `customer_id` smallint(5) unsigned NOT NULL,
  `return_date` datetime DEFAULT NULL,
  `staff_id` tinyint(3) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`rental_id`),
  UNIQUE KEY `rental_date` (`rental_date`,`inventory_id`,`customer_id`),
  KEY `idx_fk_inventory_id` (`inventory_id`),
  KEY `idx_fk_customer_id` (`customer_id`),
  KEY `idx_fk_staff_id` (`staff_id`),
  CONSTRAINT `fk_rental_customer` FOREIGN KEY (`customer_id`) REFERENCES `customer` (`customer_id`)
ON UPDATE CASCADE,
  CONSTRAINT `fk_rental_inventory` FOREIGN KEY (`inventory_id`) REFERENCES `inventory`
(`inventory_id`) ON UPDATE CASCADE,
  CONSTRAINT `fk_rental_staff` FOREIGN KEY (`staff_id`) REFERENCES `staff` (`staff_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

staff

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
staff_id	tinyint(3) unsigned	NO		auto_increment	
first_name	varchar(45)	NO			
last_name	varchar(45)	NO			
address_id	smallint(5) unsigned	NO			
picture	blob	YES			
email	varchar(50)	YES			
store_id	tinyint(3) unsigned	NO			
active	tinyint(1)	NO	1		
username	varchar(16)	NO			
password	varchar(40)	YES			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
PRIMARY	staff_id	true
idx_fk_store_id	store_id	false
idx_fk_address_id	address_id	false

Create Script

```
CREATE TABLE `staff` (
  `staff_id` tinyint(3) unsigned NOT NULL AUTO_INCREMENT,
  `first_name` varchar(45) NOT NULL,
  `last_name` varchar(45) NOT NULL,
  `address_id` smallint(5) unsigned NOT NULL,
  `picture` blob,
  `email` varchar(50) DEFAULT NULL,
  `store_id` tinyint(3) unsigned NOT NULL,
  `active` tinyint(1) NOT NULL DEFAULT '1',
  `username` varchar(16) NOT NULL,
  `password` varchar(40) CHARACTER SET utf8 COLLATE utf8_bin DEFAULT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`staff_id`),
  KEY `idx_fk_store_id` (`store_id`),
  KEY `idx_fk_address_id` (`address_id`),
  CONSTRAINT `fk_staff_address` FOREIGN KEY (`address_id`) REFERENCES `address` (`address_id`) ON
UPDATE CASCADE,
  CONSTRAINT `fk_staff_store` FOREIGN KEY (`store_id`) REFERENCES `store` (`store_id`) ON UPDATE
CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

store

> Comment :
> Engine : InnoDB
> Collation : utf8_general_ci

Columns

name	type	null	default	extra	comment
store_id	tinyint(3) unsigned	NO		auto_increment	
manager_staff_id	tinyint(3) unsigned	NO			
address_id	smallint(5) unsigned	NO			
last_update	timestamp	NO	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	

Indexs

name	columns	isnull
idx_fk_address_id	address_id	false
PRIMARY	store_id	true
idx_unique_manager	manager_staff_id	true

Create Script

```
CREATE TABLE `store` (
  `store_id` tinyint(3) unsigned NOT NULL AUTO_INCREMENT,
  `manager_staff_id` tinyint(3) unsigned NOT NULL,
  `address_id` smallint(5) unsigned NOT NULL,
  `last_update` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`store_id`),
  UNIQUE KEY `idx_unique_manager` (`manager_staff_id`),
  KEY `idx_fk_address_id` (`address_id`),
  CONSTRAINT `fk_store_address` FOREIGN KEY (`address_id`) REFERENCES `address` (`address_id`) ON
UPDATE CASCADE,
  CONSTRAINT `fk_store_staff` FOREIGN KEY (`manager_staff_id`) REFERENCES `staff` (`staff_id`) ON
UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

goto table list...

actor_info

Create Script

```
CREATE SQL SECURITY INVOKER VIEW `actor_info` AS select `a`.`actor_id` AS
`actor_id`,`a`.`first_name` AS `first_name`,`a`.`last_name` AS `last_name`,group_concat(distinct
concat(`c`.`name`,': ',(select group_concat(`f`.`title` order by `f`.`title` ASC separator ', ')
from ((`film` `f` join `film_category` `fc` on((`f`.`film_id` = `fc`.`film_id`))) join `film_actor`
`fa` on((`f`.`film_id` = `fa`.`film_id`))) where ((`fc`.`category_id` = `c`.`category_id`) and
(`fa`.`actor_id` = `a`.`actor_id`)))) order by `c`.`name` ASC separator '; ') AS `film_info` from
(((`actor` `a` left join `film_actor` `fa` on((`a`.`actor_id` = `fa`.`actor_id`))) left join
`film_category` `fc` on((`fa`.`film_id` = `fc`.`film_id`))) left join `category` `c`
on((`fc`.`category_id` = `c`.`category_id`))) group by
`a`.`actor_id`,`a`.`first_name`,`a`.`last_name`
```

goto view list...

customer_list

Create Script

```
CREATE VIEW `customer_list` AS select `cu`.`customer_id` AS `ID`,concat(`cu`.`first_name`,_utf8'
',`cu`.`last_name`) AS `name`,`a`.`address` AS `address`,`a`.`postal_code` AS `zip code`,`a`.`phone`
AS `phone`,`city`.`city` AS `city`,`country`.`country` AS
`country`,if(`cu`.`active`,_utf8'active',_utf8'') AS `notes`,`cu`.`store_id` AS `SID` from
(((`customer` `cu` join `address` `a` on((`cu`.`address_id` = `a`.`address_id`))) join `city`
on((`a`.`city_id` = `city`.`city_id`))) join `country` on((`city`.`country_id` =
`country`.`country_id`)))
```

goto view list...

film_list

Create Script

```
CREATE VIEW `film_list` AS select `film`.`film_id` AS `FID`,`film`.`title` AS
`title`,`film`.`description` AS `description`,`category`.`name` AS `category`,`film`.`rental_rate`
AS `price`,`film`.`length` AS `length`,`film`.`rating` AS
`rating`,group_concat(concat(`actor`.`first_name`,_utf8' ',`actor`.`last_name`) separator ', ') AS
`actors` from ((((`category` left join `film_category` on((`category`.`category_id` =
`film_category`.`category_id`))) left join `film` on((`film_category`.`film_id` =
`film`.`film_id`))) join `film_actor` on((`film`.`film_id` = `film_actor`.`film_id`))) join `actor`
on((`film_actor`.`actor_id` = `actor`.`actor_id`))) group by `film`.`film_id`,`category`.`name`
```

goto view list...

nicer_but_slower_film_list

Create Script

```
CREATE VIEW `nicer_but_slower_film_list` AS select `film`.`film_id` AS `FID`,`film`.`title` AS
`title`,`film`.`description` AS `description`,`category`.`name` AS `category`,`film`.`rental_rate`
AS `price`,`film`.`length` AS `length`,`film`.`rating` AS
`rating`,group_concat(concat(concat(upper(substr(`actor`.`first_name`,1,1)),lower(substr(`actor`.`fi
rst_name`,2,length(`actor`.`first_name`))),_utf8'
',concat(upper(substr(`actor`.`last_name`,1,1)),lower(substr(`actor`.`last_name`,2,length(`actor`.`l
ast_name`)))))) separator ', ') AS `actors` from ((((`category` left join `film_category`
on((`category`.`category_id` = `film_category`.`category_id`))) left join `film`
on((`film_category`.`film_id` = `film`.`film_id`))) join `film_actor` on((`film`.`film_id` =
`film_actor`.`film_id`))) join `actor` on((`film_actor`.`actor_id` = `actor`.`actor_id`))) group by
`film`.`film_id`,`category`.`name`
```

goto view list...

sales_by_film_category

Create Script

```
CREATE VIEW `sales_by_film_category` AS select `c`.`name` AS `category`,sum(`p`.`amount`) AS
`total_sales` from (((((`payment` `p` join `rental` `r` on((`p`.`rental_id` = `r`.`rental_id`)))
join `inventory` `i` on((`r`.`inventory_id` = `i`.`inventory_id`))) join `film` `f`
on((`i`.`film_id` = `f`.`film_id`))) join `film_category` `fc` on((`f`.`film_id` = `fc`.`film_id`)))
join `category` `c` on((`fc`.`category_id` = `c`.`category_id`))) group by `c`.`name` order by
`total_sales` desc
```

goto view list...

sales_by_store

Create Script

```
CREATE VIEW `sales_by_store` AS select concat(`c`.`city`,_utf8',',`cy`.`country`) AS
`store`,concat(`m`.`first_name`,_utf8' ',`m`.`last_name`) AS `manager`,sum(`p`.`amount`) AS
`total_sales` from (((((((`payment` `p` join `rental` `r` on((`p`.`rental_id` = `r`.`rental_id`)))
join `inventory` `i` on((`r`.`inventory_id` = `i`.`inventory_id`))) join `store` `s`
on((`i`.`store_id` = `s`.`store_id`))) join `address` `a` on((`s`.`address_id` = `a`.`address_id`)))
join `city` `c` on((`a`.`city_id` = `c`.`city_id`))) join `country` `cy` on((`c`.`country_id` =
`cy`.`country_id`))) join `staff` `m` on((`s`.`manager_staff_id` = `m`.`staff_id`))) group by
`s`.`store_id` order by `cy`.`country`,`c`.`city`
```

goto view list...

staff_list

Create Script

```
CREATE VIEW `staff_list` AS select `s`.`staff_id` AS `ID`,concat(`s`.`first_name`,_utf8'
',`s`.`last_name`) AS `name`,`a`.`address` AS `address`,`a`.`postal_code` AS `zip code`,`a`.`phone`
AS `phone`,`city`.`city` AS `city`,`country`.`country` AS `country`,`s`.`store_id` AS `SID` from
(((`staff` `s` join `address` `a` on((`s`.`address_id` = `a`.`address_id`))) join `city`
on((`a`.`city_id` = `city`.`city_id`))) join `country` on((`city`.`country_id` =
`country`.`country_id`)))
```

goto view list...

get_customer_balance

> Comment :

Create Script

```
CREATE FUNCTION `get_customer_balance`(p_customer_id INT, p_effective_date DATETIME) RETURNS
decimal(5,2)
    READS SQL DATA
    DETERMINISTIC
BEGIN









  DECLARE v_rentfees DECIMAL(5,2);
  DECLARE v_overfees INTEGER;
  DECLARE v_payments DECIMAL(5,2);

  SELECT IFNULL(SUM(film.rental_rate),0) INTO v_rentfees
    FROM film, inventory, rental
    WHERE film.film_id = inventory.film_id
      AND inventory.inventory_id = rental.inventory_id
      AND rental.rental_date <= p_effective_date
      AND rental.customer_id = p_customer_id;

  SELECT IFNULL(SUM(IF((TO_DAYS(rental.return_date) - TO_DAYS(rental.rental_date)) >
film.rental_duration,
        ((TO_DAYS(rental.return_date) - TO_DAYS(rental.rental_date)) - film.rental_duration),0)),0)
INTO v_overfees
    FROM rental, inventory, film
    WHERE film.film_id = inventory.film_id
      AND inventory.inventory_id = rental.inventory_id
      AND rental.rental_date <= p_effective_date
      AND rental.customer_id = p_customer_id;


  SELECT IFNULL(SUM(payment.amount),0) INTO v_payments
    FROM payment

    WHERE payment.payment_date <= p_effective_date
    AND payment.customer_id = p_customer_id;

  RETURN v_rentfees + v_overfees - v_payments;
END
```

goto function list...

inventory_held_by_customer

> Comment :

Create Script

```
CREATE FUNCTION `inventory_held_by_customer`(p_inventory_id INT) RETURNS int(11)
    READS SQL DATA
BEGIN
  DECLARE v_customer_id INT;
  DECLARE EXIT HANDLER FOR NOT FOUND RETURN NULL;

  SELECT customer_id INTO v_customer_id
  FROM rental
  WHERE return_date IS NULL
  AND inventory_id = p_inventory_id;

  RETURN v_customer_id;
END
```

goto function list...

inventory_in_stock

> Comment :

Create Script

```
CREATE FUNCTION `inventory_in_stock`(p_inventory_id INT) RETURNS tinyint(1)
    READS SQL DATA
BEGIN
    DECLARE v_rentals INT;
    DECLARE v_out     INT;




    SELECT COUNT(*) INTO v_rentals
    FROM rental
    WHERE inventory_id = p_inventory_id;

    IF v_rentals = 0 THEN
      RETURN TRUE;
    END IF;

    SELECT COUNT(rental_id) INTO v_out
    FROM inventory LEFT JOIN rental USING(inventory_id)
    WHERE inventory.inventory_id = p_inventory_id
    AND rental.return_date IS NULL;

    IF v_out > 0 THEN
      RETURN FALSE;
    ELSE
      RETURN TRUE;
    END IF;
END
```

goto function list...

film_in_stock

> Comment :

Create Script

```
CREATE PROCEDURE `film_in_stock`(IN p_film_id INT, IN p_store_id INT, OUT p_film_count INT)
    READS SQL DATA
BEGIN
     SELECT inventory_id
     FROM inventory
     WHERE film_id = p_film_id
     AND store_id = p_store_id
     AND inventory_in_stock(inventory_id);

     SELECT FOUND_ROWS() INTO p_film_count;
END
```

goto procedure list...

film_not_in_stock

> Comment :

Create Script

```
CREATE PROCEDURE `film_not_in_stock`(IN p_film_id INT, IN p_store_id INT, OUT p_film_count INT)
    READS SQL DATA
BEGIN
     SELECT inventory_id
     FROM inventory
     WHERE film_id = p_film_id
     AND store_id = p_store_id
     AND NOT inventory_in_stock(inventory_id);

     SELECT FOUND_ROWS() INTO p_film_count;
END
```

goto procedure list...

rewards_report

> Comment : Provides a customizable report on best customers

Create Script

```
CREATE PROCEDURE `rewards_report`(
    IN min_monthly_purchases TINYINT UNSIGNED
    , IN min_dollar_amount_purchased DECIMAL(10,2) UNSIGNED
    , OUT count_rewardees INT
)
    READS SQL DATA
    COMMENT 'Provides a customizable report on best customers'
proc: BEGIN

    DECLARE last_month_start DATE;
    DECLARE last_month_end DATE;


    IF min_monthly_purchases = 0 THEN
        SELECT 'Minimum monthly purchases parameter must be > 0';
        LEAVE proc;
    END IF;
    IF min_dollar_amount_purchased = 0.00 THEN
        SELECT 'Minimum monthly dollar amount purchased parameter must be > $0.00';
        LEAVE proc;
    END IF;


    SET last_month_start = DATE_SUB(CURRENT_DATE(), INTERVAL 1 MONTH);
    SET last_month_start = STR_TO_DATE(CONCAT(YEAR(last_month_start),'-
',MONTH(last_month_start),'-01'),'%Y-%m-%d');
    SET last_month_end = LAST_DAY(last_month_start);


    CREATE TEMPORARY TABLE tmpCustomer (customer_id SMALLINT UNSIGNED NOT NULL PRIMARY KEY);


    INSERT INTO tmpCustomer (customer_id)
    SELECT p.customer_id
    FROM payment AS p
    WHERE DATE(p.payment_date) BETWEEN last_month_start AND last_month_end
    GROUP BY customer_id
    HAVING SUM(p.amount) > min_dollar_amount_purchased
    AND COUNT(customer_id) > min_monthly_purchases;


    SELECT COUNT(*) FROM tmpCustomer INTO count_rewardees;


    SELECT c.*
    FROM tmpCustomer AS t
    INNER JOIN customer AS c ON t.customer_id = c.customer_id;


    DROP TABLE tmpCustomer;
END
```

goto procedure list...