Handout 5: Filtering with the WHERE Clause

(It's going to be ok, just follow this matrix 1-->2-->3)

	Step 1: Choose Condition			STEP 3: Choose data type of column				
USE CASE	OPERATOR	DESCRIPTION	STEP 2: Choose use case	BOOLEAN EXAMPLE	CHARACTER EXAMPLE	NUMERIC EXAMPLE	DATE EXAMPLE	DATE WITH TO_CHAR EXAMPLE
1	=	Equal (single criteria)	You want to filter on 1 column on 1 condition	PLAYABLE = TRUE	ALBUM = 'Californication'	ORG_PRICE = 9.99	RELEASE_DATE = '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') = '2009'
	>	Greater than (single criteria)				ORG_PRICE > 9.99	RELEASE_DATE > '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') > '2009'
	<	Less than (single criteria)				ORG_PRICE < 9.99	RELEASE_DATE < '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') < '2009'
	>=	Greater than or equal (single criteria)				ORG_PRICE >= 9.99	RELEASE_DATE >= '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') >= '2009'
	<=	Less than or equal (single criteria)				ORG_PRICE <= 9.99	RELEASE_DATE <= '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') <= '2009'
	<> or !=	Not equal		PLAYABLE != FALSE	ALBUM != 'Californication'	ORG_PRICE != 9.99	RELEASE_DATE != '2004-02-10'	TO_CHAR(RELEASE_DATE, 'YYYY') != '2009'
	LIKE	Look for a specified pattern in a column			ARTIST LIKE '%K'			
	NOT LIKE	Look for a specified pattern in a column (Not Like)			ARTIST NOT LIKE '%K'			
2	BETWEEN	Between two numeric values or dates (multiple criteria)	You want to filter between two ranges (numeric or date)			ORG_PRICE BETWEEN 9.99 AND 12.99	RELEASE_DATE BETWEEN '2001-01 01' AND '2009-01-01'	TO_CHAR(RELEASE_DATE, 'YYYY') BETWEEN '2009' and '2011'
3	AND	Logical operator AND	You want to filter on multiple columns	PLAYABLE = TRUE AND GENRE = 'Rap'	ARTIST = 'Kanye West' AND PLAYABLE = TRUE	9.99	RELEASE_DATE >= '2001-01-01' AND RELEASE_DATE <= '2009-01-	(same as left)
	OR	Logical operator OR		PLAYABLE = TRUE OR GENRE = 'Metal'	ARTIST = 'Kanye West' OR RATING = 5	9.99	RELEASE_DATE >= '2001-01-01' OR GENRE = 'Electronic'	(same as left)
4	IS	Logical operator for (null) records	You are looking for null values in a column	PLAYABLE IS NULL	ARTIST IS NULL	ORG_PRICE IS NULL	RELEASE_DATE IS NULL	(same as left)
	IS NOT	Logical operator for not (null) records		PLAYABLE IS NOT NULL	ARTIST IS NOT NULL	ORG_PRICE IS NOT NULL	RELEASE_DATE IS NOT NULL	(same as left)
5	IN	Equal (multiple criteria)	You want to filter on 1 column with multiple conditions	BURNED IN (TRUE, FALSE)	ALBUM IN ('Californication', 'By the Way')	ORG_PRICE IN (9.99, 12.99)	RELEASE_DATE IN ('2012-01- 01', '2017-01-02')	TO_CHAR(RELEASE_DATE, 'YYYY') IN ('2009' ,'2011')
	NOT IN	Not equal (multiple criteria)		BURNED NOT IN (TRUE, FALSE)	ALBUM NOT IN ('Californication', 'By the Way')	ORG_PRICE NOT IN (9.99, 12.99)	RELEASE_DATE NOT IN ('2012-01 01', '2017-01-02')	TO_CHAR(RELEASE_DATE, 'YYYY') NOT IN ('2009','2011')

Key Takeaways: Filtering with the WHERE Clause