

# Using Data Validation, Sort and Filter

		<b>GENDER</b>	<b>PERFORMANCE</b>	<b>SORT (Ascending)</b>		
		Female ▼	Excellent ▼	✓		
<b>Filter &amp; Sort</b>						
<b>ssn</b>	<b>lastname</b>	<b>firstname</b>	<b>hiredate</b>	<b>salary</b>	<b>gender</b>	<b>performance</b>
333-66-1234	Brown	Marietta	3/7/2001	\$18,500	Female	Excellent
000-02-2222	Adams	Sandy	1/15/2001	\$19,500	Female	Excellent
109-87-6543	Wood	Emily	3/12/1997	\$69,000	Female	Excellent
=SORT( FILTER(EMPLOYEE, (SALARY < 80000) * (PERFORMANCE = L10) * (GENDER = K10)), 5, M10)						

# Using Conditional Formatting

Conditional Formatting							
ssn	lastname	firstname	hiredate	salary	gender	performance	PROMOTE
000-01-0000	Milgrom	Patricia	10/1/2004	\$57,500	Female	Average	<input checked="" type="checkbox"/>
000-02-2222	Adams	Sandy	1/15/2001	\$19,500	Female	Excellent	<input type="checkbox"/>
109-87-6543	Wood	Emily	3/12/1997	\$69,000	Female	Excellent	<input checked="" type="checkbox"/>
109-87-6544	Foster	Harold	8/14/2005	\$55,000	Male	Good	<input type="checkbox"/>
111-12-1111	Johnson	James	5/3/1996	\$47,500	Female	Good	<input type="checkbox"/>
123-45-6789	Coulter	Tracy	2/14/1993	\$100,000		Good	<input checked="" type="checkbox"/>
222-23-2222	Marlin	Bill	3/28/1977	\$125,000	Male		<input type="checkbox"/>
222-52-5555	Smith	Mary	1/1/2006	\$42,500	Female	Average	<input checked="" type="checkbox"/>
245-67-8910	Johanson	Sandy	6/2/2005	\$69,000	Female		<input type="checkbox"/>
333-34-3333	Manin	Emily	12/1/2000	\$49,500	Female	Average	<input type="checkbox"/>
333-43-4444	Smith	Frank	1/29/1991	\$65,000	Male	Good	<input checked="" type="checkbox"/>
333-66-1234	Brown	Marietta	3/7/2001	\$18,500	Female	Excellent	<input type="checkbox"/>
335-55-5533	Jones	Holly	4/8/1986	\$65,000	Female	Good	<input checked="" type="checkbox"/>

# Using Query Function

To Do								
Create <b>drop down list</b> to filter our table								
<b>Performance</b>	<b>Gender</b>	<b>Sort</b>						
Excellent ▼	Male ▼	desc ▼	=QUERY(EMPLOYEES, "select * where G = '"&I7&'" and F ='"&J7&'" order by E '"&K7&'"")					
<b>ssn</b>	<b>lastname</b>	<b>firstname</b>	<b>hiredate</b>	<b>salary</b>	<b>gender</b>	<b>performance</b>		
464-64-4466	Webster	David	1/29/1991	\$58,500	Male	Excellent		
776-67-6666	Adamson	David	10/4/2002	\$52,000	Male	Excellent		
555-56-5555	Charles	Kenneth	6/18/1998	\$40,000	Male	Excellent		

# Using Text, Date and Vlookup Function

				change to eng date	
TH Date	Day	Month	Year	EN Date	
12 ธ.ค. 2563	12	12	2020	2020-12-12	
25 พ.ย. 2561	25	11	2018	2018-11-25	
09 ก.ย. 2562	09	9	2019	2019-09-09	
07 ม.ค. 2560	07	1	2017	2017-01-07	
15 เม.ย. 2563	15	4	2020	2020-04-15	
06 มิ.ย. 2563	06	6	2020	2020-06-06	
<b>Day</b>	=ArrayFormula(LEFT(D4:D9,2))				
<b>Month</b>	=ArrayFormula(Vlookup(TRIM(MID(D4:D9,4,5)),\$A\$4:\$B\$15,2,0))				
<b>Year</b>	=ArrayFormula(RIGHT(D4:D9,4)-543)				
<b>EN Date</b>	=ArrayFormula(DATE(G4:G9,F4:F9,E4:E9))				

# Using Regexextract Function

Project - ID Card Parser

Customer Information	ID	Gender	Firstname	Lastname	DOB	Age	Address	Zipcode	Expired Date	Expired This Year
ID 1-1078-00555-99-1 Mr. John David Date of Birth 20 Sep 1988 Address 67 Bangkok Thailand 10560 Expired Date 31 Dec 2023	1-1078-00555-99-1	male	John	David	20 Sep 1988	35	67 Bangkok Thailand	10560	31 Dec 2023	TRUE
ID 3-5522-87666-87-2 Miss. Carry Anna Date of Birth 18 Jan 1995 Address 967 Tokyo Japan 10880 Expired Date 25 Apr 2025	3-5522-87666-87-2	female	Carry	Anna	18 Jan 1995	28	967 Tokyo Japan	10880	25 Apr 2025	FALSE
ID 1-2222-03874-23-6 Mr. Kevin Demio Date of Birth 14 Feb 1992 Address 7878 Washington United States 11155 Expired Date 31 Oct 2020	1-2222-03874-23-6	male	Kevin	Demio	14 Feb 1992	31	7878 Washington United States	11155	31 Oct 2020	FALSE
ID 1-1078-00555-99-1 Mr. Stuart Lonely Date of Birth 20 Sep 1982 Address 554 Seoul Korea 89237 Expired Date 31 Mar 2024	1-1078-00555-99-1	male	Stuart	Lonely	20 Sep 1982	41	554 Seoul Korea	89237	31 Mar 2024	FALSE
ID 1-1078-00555-99-1 Miss. Anya Tayloy Date of Birth 05 May 1985 Address 998 London United Kingdom 55387 Expired Date 15 Nov 2025	1-1078-00555-99-1	female	Anya	Tayloy	05 May 1985	38	998 London United Kingdom	55387	15 Nov 2025	FALSE
<b>Guideline</b> นักเรียนลองปรับใช้จากตรงนี้เป็นต้นครับ Regex สามารถเขียนได้หลายแบบเลย 🤖										
ID	=REGEXEXTRACT(A2, "[0-9]-[0-9][4]-[0-9][5]-[0-9][2]-[0-9]")					[0-9] = \d	=ArrayFormula(REGEXEXTRACT(A4:A8,"[0-9]-[0-9][4]-[0-9][5]-[0-9][2]-[0-9]{1}"))			
Gender	=REGEXEXTRACT(A2, "M[a-z]+\.")						=ArrayFormula(SWITCH(REGEXEXTRACT(A4:A8,"M[a-z]+\."),"Mr.,"male","Mrs.,"female","Miss.,"female"))			
Firstname	=REGEXEXTRACT(A2, "M[a-z]+\.[A-Za-z]+ [A-Za-z]+")						=ArrayFormula(REGEXEXTRACT(A4:A8, "M[a-z]+\.[A-Za-z]+ [A-Za-z]+"))			
Lastname	=REGEXEXTRACT(A2, "M[a-z]+\.[A-Za-z]+ ([A-Za-z]+)")						=ArrayFormula(REGEXEXTRACT(A4:A8, "M[a-z]+\.[A-Za-z]+ ([A-Za-z]+)"))			
DOB	=REGEXEXTRACT(A2,"Date of Birth ([0-9][2] [A-Za-z]+ [0-9][4])")						=ArrayFormula(REGEXEXTRACT(A4:A8, "Date of Birth ([0-9][2] [A-Za-z][3] [0-9][4])"))			
Age	=DATEDIF(F2, TODAY(), "Y")						=ArrayFormula(DATEDIF(F4:F8,today(),"y"))			
Address	=REGEXEXTRACT(A2,"Address ([0-9]+ [A-Za-z]+ [A-Za-z]+)")						=ArrayFormula(IFERROR(REGEXEXTRACT(A4:A8,"Address \d+ [A-Za-z]+ [A-Za-z]+ \d{5}"),REGEXEXTRACT(A4:A8,"Address \d+ [A-Za-z]+ [A-Za-z]+ [A-Za-z]+ \d{5}")))			
Zipcode	=TRIM(REGEXEXTRACT(A2," \d{5}"))						=ArrayFormula(TRIM(REGEXEXTRACT(A4:A8," \d{5}")))			
Expired Date	=REGEXEXTRACT(A2, "Expired Date ([d][2] \w[3] \d[4])")						=ArrayFormula(REGEXEXTRACT(A4:A8, "Expired Date ([0-9][2] [A-Za-z][3] [0-9][4])"))			
Expired This Year	=RIGHT(J2,4)="2020"						=ArrayFormula(IF(YEAR(J4:J8)=2023,TRUE,FALSE))			

## Creating my own formula

CELSIUS		FAHRENHEIT				
	25		77	=ArrayFormula(CEL_TO_FAH(B13:B17))		
	32		89.6			
	43		109.4			
	57		134.6			
	100		212			



# Using Vlookup Function

		=ArrayFormula(VLOOKUP(I5:I29,\$A\$33:\$F\$40,{2,3,4,5,6},FALSE))					=ArrayFormula(VLOOKUP(H5:H29,\$A\$44:\$E\$47,{2,3,4,5},FALSE))			
		put every column here								
positionID	locationID	locationcity	address	state	zipcode	officephone	positiontitle	educationrequi	minsalary	maxsalary
2	2	Boston	3 Commons Bl	MA	2190	(617)123-4444	Manager	4 year degree	50000	150000
3	1	Atlanta	450 Peachtree	GA	30316	(404)333-5555	Trainee	2 year degree	18000	25000
2	5	New York City	1650 Washingtc	NY	15648	(518)256-3100	Manager	4 year degree	50000	150000
1	3	Chicago	500 Loop High	IL	60620	(312)444-6666	Account Repre	4 year degree	25000	75000
1	3	Chicago	500 Loop High	IL	60620	(312)444-6666	Account Repre	4 year degree	25000	75000
2	1	Atlanta	450 Peachtree	GA	30316	(404)333-5555	Manager	4 year degree	50000	150000
2	4	Miami	210 Biscayne Bl	FL	33103	(305)787-9999	Manager	4 year degree	50000	150000
1	3	Chicago	500 Loop High	IL	60620	(312)444-6666	Account Repre	4 year degree	25000	75000
1	6	Denver	312 Mount View	CO	54657	(205)607-5289	Account Repre	4 year degree	25000	75000
1	2	Boston	3 Commons Bl	MA	2190	(617)123-4444	Account Repre	4 year degree	25000	75000
1	1	Atlanta	450 Peachtree	GA	30316	(404)333-5555	Account Repre	4 year degree	25000	75000
3	1	Atlanta	450 Peachtree	GA	30316	(404)333-5555	Trainee	2 year degree	18000	25000
2	5	New York City	1650 Washingtc	NY	15648	(518)256-3100	Manager	4 year degree	50000	150000
2	6	Denver	312 Mount View	CO	54657	(205)607-5289	Manager	4 year degree	50000	150000