

**Paste here your Name**

Product	Sales (USD)	Salesmanager's gender (male=1)	Salesmanager's experience, years	Customer review (1=very bad, 5=very good)	Paid (1=Yes, 0=No)
A	23870	0	1	1	0
B	24158	0	2	4	0
C	23714	0	3	5	1
D	23601	1	4	1	1
A	22640	0	5	1	0
B	23058	0	6	2	1
C	23973	1	7	2	0
D	26519	1	8	3	0
A	24354	0	9	1	0
B	29402	0	10	4	0
C	24018	0	11	2	0
D	26775	0	12	4	0
A	25400	1	13	1	1
B	28258	0	14	1	0
C	25272	0	15	3	1
D	29778	0	16	1	1
A	28072	1	17	3	1
B	28811	1	18	5	1
C	27906	1	19	5	1
D	25643	1	20	4	1
A	24020	1	21	1	1
B	29322	1	22	1	0
C	28172	1	23	2	1
D	25978	0	24	4	0
A	27659	0	25	5	0
B	26204	0	26	2	1
C	23899	1	27	2	1
D	22445	1	28	5	0
A	23201	1	29	5	0
B	22512	0	30	4	1
C	27131	0	31	3	0
D	21321	0	32	3	0
A	20949	0	33	5	0
B	24102	1	34	4	0
C	22378	0	35	2	0
D	20148	1	36	1	1
A	22614	0	37	5	1
B	20326	1	38	2	0
C	19473	1	39	2	0
D	19175	0	40	2	0
A	20920	0	41	3	0
B	20101	1	42	2	1
C	15929	1	43	3	1

**Exercise 1: Fill-in the table below**

Product	Sales	Paid, %	Share of Customer Reviews				
			1=very bad	2=bad	3=not bad	4=good	5=very good
A							
B							
C							
D							
<b>Total</b>							

**Exercise 2. Based on data in Sheet "1" make a scatterplot chart (use any colors):**

Y	Sales
X	Salesmanager's experience, years
Groups (highlight by color paid and non- paid orders)	Paid
Gridlines	Major, Minor (vertical and horizontal)

**Exercise 3. Merge tables (fill columns of the left table with data from the right table)**

Table 1						
OFFENSE C	INCIDENT	NEIGHBORH	DISTRICT I	OFFENSE T	OFFENSE C	IS CRIME
5213		montbello	5			
2399		gateway-gree	5			
2305	2932 S JOSE	wellshire	3			
2399	705 S COLO	belcaro	3			
2303	2810 E 1ST	cherry-creek	3			
5499	2100 BLOCK	city-park-wes	6			
2304	995 N FEDE	villa-park	1			
5707	E SPEER BL	speer	3			
5401	W 13TH AVI	civic-center	6			
2305	2828 N ZUN	highland	1			
3572	E EVANS AV	goldsmith	3			
2304	1220 S INCA	ruby-hill	4			
2303	1505 S COLC	cory-merrill	3			
2404	2850 W 26TH	jefferson-par	1			
2303	950 S QUEB	windsor	3			
2305	3400 BLK N	highland	1			
2404	6825 E ILIFF	goldsmith	3			
5707	10TH / COLI	lincoln-park	1			
2609	803 S PEARI	washington-p	3			
5441	N HAVANA	stapleton	5			
5499	3900 BLK N	stapleton	5			
5441	E LOWRY BL	lowry-field	3			
5401	29TH ST / W	five-points	2			
5499	3200 BLOCK	elyria-swanse	2			
2203	5770 E WAR	goldsmith	3			
2799	7400 E HAM	hampden-sou	3			
1316	8900 PENA I	dia	7			
5499	1600 BLOCK	platt-park	3			
2404		west-colfax	1			
5707	5046 N AKR	stapleton	5			
2399	3400 S LOW	harvey-park-	4			
2404	400 BLK N I	baker	3			
2308	1223 N LAF	cheesman-pa	6			
2404	24558 E 75T	dia	7			
4104	800 N DELA	lincoln-park	1			
1315	16TH ST / CI	cbd	6			
2404	2300 BLK S	rosedale	3			
2304	5534 N MAL	gateway-gree	5			
1006		cbd	6			
5016	7700 BLK E	stapleton	5			
2404	7001 N YAM	dia	5			
5213	12900 BLOC	montbello	5			
5441	E 6TH AVE /	hilltop	3			
2399	496 S DAYT	windsor	3			
2308	3000 E 1ST	cherry-creek	3			
2999	525 N PERR	barnum-west	4			
1313	1920 N HIGH	city-park-wes	6			
2404	1350 W COL	lincoln-park	1			
5441	S DAHLIA S	virginia-villa	3			
2999	170 N GARF	cherry-creek	3			

5707	9100 PENA I	dia	7		
2399	1885 S EME	platt-park	3		
2304	3205 N RAL	west-highland	1		
5441	125 HWYSB	lincoln-park	1		
5401	700 BLOCK	speer	3		
1315	W 48TH AVI	chaffee-park	1		
2305	2300 BLK S	rosedale	3		
5455		dia	7		
3572	2000 W COL	lincoln-park	1		
2305	1975 MILE H	jefferson-parl	1		
2399	700 BLK N I	lincoln-park	1		
1313		north-park-hi	2		
1313		city-park-wes	6		
5707		washington-v	3		
2304	74 N JULIAN	barnum	4		
5401	1680 E COLI	cheesman-par	6		
5441	600 BLOCK	washington-p	3		
1316		sunnyside	1		
1205		lincoln-park	1		
2999	436 S OSCEC	westwood	4		
2305	2700 BLOCK	jefferson-parl	1		
3542	E 40TH AVE	northeast-par	2		
2303	8270 E NOR	stapleton	5		
5441	W JEWELL A	harvey-park	4		
2202	1214 E 5TH	country-club	3		
2999	1011 S VALI	windsor	3		
2205	1001 16TH S	cbd	6		
2305	2424 DELGA	five-points	6		
2304	2646 W 13TH	sun-valley	1		
5802	490 W COLF	civic-center	6		
2305	3077 S DEX	university-hil	3		
5441	2100 BLOCK	goldsmith	3		
5499	E 17TH AVE	city-park-wes	6		
2404		virginia-villas	3		
1313		sun-valley	1		
2308	951 S HOLL	washington-v	3		
5499	N ABILENE	montbello	5		
2404	E 37TH AVE	stapleton	5		
2202	3020 E OHM	belcaro	3		
2308	777 N BANN	lincoln-park	1		
5441	3900 BLK N	clayton	2		
3512	N YOSEMIT	east-colfax	2		
1313	1350 N FILL	congress-park	2		
1205	1000 BLK S	belcaro	3		
5499	600 BLOCK	villa-park	1		
2305	1255 N GAL	lincoln-park	1		
2305	1620 PLATT	highland	1		
2303	6460 E YAL	hampden	3		
5499	E 51ST AVE	globeville	1		
3550	1500 BLOCK	north-capitol	6		
2204	4676 N QUI	berkeley	1		
2303	401 16TH ST	cbd	6		
5441		hilltop	3		
2999		west-highland	1		
2399	890 AURARI	auraria	1		
5499	W 26TH AVI	sloan-lake	1		

2303	323 S BROAD	baker	3			
5444	W KENTUCKY	westwood	4			
2303	2860 S COLFAX	university-hill	3			
2399		west-colfax	1			
5707	16199 E GATEWAY	gateway-gree	5			
5499	E ALAMEDA	washington-p	3			
2203	1516 N XAVANT	west-colfax	1			
1313		montbello	5			
5016		hampden	3			
2999	156 N COLORED	hilltop	3			
5707	4400 S QUEEN	windsor	3			
5212		washington-v	3			
2203	160 N MILWAUKEE	cherry-creek	3			
2204	5793 N CHESTNUT	stapleton	5			
4104	1200 BLOCK	five-points	2			
2404	900 BLOCK	lincoln-park	1			
2999	2500 WALNUT	five-points	2			
2404	2100 BLK S	university-pa	3			
5707	1055 10TH S	auraria	1			
5441	170 HWYWB	globeville	1			
5499	W BAYAUD	baker	3			
5499	4800 BLOCK	sunnyside	1			
2303	4100 E MEXICO	virginia-villa	3			
1316	7600 BLK E	east-colfax	2			
2399	W 6TH AVE	villa-park	1			
1205	8600 BLK E	east-colfax	2			
5441	LARIMER ST	union-station	6			
2308	634 16TH ST	cbd	6			
5312	7600 BLK E	east-colfax	2			
5401	700 BLOCK	cbd	6			
5441	1270 HWYEE	stapleton	5			
2999	2701 LARIMER	five-points	2			
5420	20TH ST / CLAY	union-station	6			
5441	15200 BLOC	montbello	5			
2305	9888 E VASSAR	hampden	3			
3612	1331 N CHESTNUT	civic-center	6			
5401	5100 BLOCK	montbello	5			
2999	19749 E 47TH	gateway-gree	5			
5441		mar-lee	4			
2203	2860 S FEDERAL	college-view-	4			
5441	S HUDSON ST	hampden	3			
1315	19TH ST / PL	highland	1			
2304	10515 E 40TH	stapleton	5			
5499	2000 BLOCK	jefferson-par	1			
2399	3470 PARK	globeville	1			
2305	5001 S ULSTER	hampden-sou	3			
2304	8354 E NOR	stapleton	5			
2304	670 N WINONA	villa-park	1			
2999	3251 W AVENUE	west-colfax	1			
2305	2027 W COLFAX	lincoln-park	1			
2399	780 N DELAWARE	lincoln-park	1			
5441	W 4TH AVE	baker	3			
2308	4500 N WASHINGTON	globeville	1			
1316	103 S OGDEN	speer	3			
3550	1100 BLOCK	five-points	6			
1109		capitol-hill	6			

5499	2300 BLOCK	clayton	2			
2399	222 N MILW	cherry-creek	3			
3572	1000 BLOCK	westwood	4			
1315	5701 E MLK	northeast-par	2			
2404	1600 BLOCK	north-capitol-	6			
2204	1973 S PENN	platt-park	3			
5401	1515 CHAM	cbd	6			
2305	1350 N GRA	capitol-hill	6			
5499	11000 BLOC	stapleton	5			
1316	1962 E COLI	cheesman-par	6			
5441	E 31ST AVE	whittier	2			
5441	I70 HWYWB	stapleton	5			
3532	E COLFAX A	east-colfax	2			
5499	E ELK PL / N	montbello	5			
3510	1400 BLK N	capitol-hill	6			
2999	9655 E 5TH	lowry-field	3			
5312	4403 S TAM	hampden-sou	3			
2305	3942 N JERI	gateway-gree	5			
5401	I70 HWYEB	stapleton	5			
2404	I25 HWYSB	hampden-sou	3			
2303	6440 E YAL	hampden	3			
2304	3600 BLK W	fort-logan	4			
5441	N MONACO	northeast-par	2			
1313		montbello	5			
5401	N QUEBEC S	montclair	2			
2305	3839 N LOW	berkeley	1			
5707		west-colfax	1			
5441	E 31ST AVE	skyland	2			
5499	4700 BLK N	montbello	5			
3510	4200 N TEJC	sunnyside	1			
2399	2425 N BRO	five-points	6			
5499	2600 BLOCK	sloan-lake	1			
5441	18700 BLK E	gateway-gree	5			
1315	4300 BLOCK	sunnyside	1			
1109		bear-valley	4			
2404	100 BLK S U	barnum-west	4			
2304	800 BLK 24	five-points	6			
5441	1300 BLOCK	montclair	2			
2204	1872 N RAC	city-park-wes	6			
5441		highland	1			
2305	2828 N ZUN	highland	1			
5441	N LINCOLN	north-capitol-	6			
5016	7777 E 23RD	stapleton	5			
3572	W 14TH AVI	sun-valley	1			
2305	7415 E 41ST	stapleton	5			
5441	N COLORAD	elyria-swanse	2			
1313	6000 E ILIFF	goldsmith	3			
5499	900 BLOCK	sun-valley	1			
5707	1630 N IVAN	south-park-hi	2			
5401	1400 BLOCK	capitol-hill	6			
1313		elyria-swanse	2			
2308	1920 17TH S	union-station	6			
2399	8900 PENA I	dia	7			
2307	2223 S MON	goldsmith	3			
2999	2075 S JOSE	university-pa	3			
5441		whittier	2			

2204	4529 N WIN	berkeley	1			
2609	990 N LOGA	capitol-hill	6			
5441	E 11TH AVE	capitol-hill	6			
5401	S SANTA FE	overland	3			
3562		bear-valley	4			
5441	0 BLOCK N	cherry-creek	3			
912	2100 BLOCK	five-points	6			
2404	E COLFAX A	east-colfax	2			
5444	11000 BLOC	stapleton	5			
2404	4995 N ARG	gateway-gree	5			
1102		belcaro	3			
5441	N BROADW	capitol-hill	6			
5441	N FEDERAL	barnum	4			
5401	1600 BLOCK	city-park	2			
2305	1700 BLK S	ruby-hill	4			
5312	2626 N OSC	sloan-lake	1			
2204	2785 N SPEE	jefferson-parl	1			
3504		city-park	2			
2303	7930 E NOR	stapleton	5			
5441	N FEDERAL	barnum	4			
1316	757 E 20TH	five-points	6			
5441	E COLFAX A	cheesman-par	6			
2399	2300 BLK N	north-park-hi	2			
5441	6400 BLOCK	washington-v	3			
5499	E GVR BLV	gateway-gree	5			
4803	900 BLOCK	washington-v	3			
2308	11200 E DA	kennedy	3			
2304	200 BLK S S	barnum-west	4			
5707	1150 10TH S	auraria	1			
4801	601 N LIPAN	lincoln-park	1			
5499	W 26TH AV	sloan-lake	1			
2999	8384 E 49TH	stapleton	5			
5312		montbello	5			
5441	S MONACO	goldsmith	3			
5401	170 HWYEB	stapleton	5			
2205	955 LAWRE	auraria	1			
2304	340 W ARCH	baker	3			
3612	1331 N CHE	civic-center	6			
2605	3890 N QUE	stapleton	5			
3612	1331 N CHE	civic-center	6			
2204	722 W 11TH	lincoln-park	1			
2204	1700 BASSE	union-station	6			
5401	1700 BLK N	north-capitol	6			
5441	S ZUNI ST /	ruby-hill	4			
5499	125 HWYNB	washington-p	3			
2404	4800 BLK N	chaffee-park	1			
1102		five-points	2			
2202	124 N JERSE	hilltop	3			
5401	170 HWYEB	berkeley	1			
1313	667 N BANN	lincoln-park	1			
2303	757 E 20TH	five-points	6			
2304	3100 S FEDE	college-view-	4			
5441	S FEDERAL	harvey-park	4			
5441	E 16TH AVE	north-capitol	6			
5312		harvey-park	4			
2305	1000 S BROA	washington-p	3			

5707	2111 CHAM	five-points	6			
2203	2997 N ULS	stapleton	5			
5312		montbello	5			
5441	E COLFAX A	east-colfax	2			
2399	350 N QUEB	lowry-field	3			
3550	S FEDERAL	mar-lee	4			
2999	3081 S DAH	university-hil	3			
5441	E 13TH AVE	capitol-hill	6			
5441	170 HWYEB	northeast-par	2			
2999	2836 N FEDI	jefferson-parl	1			
5441	N FEDERAL	west-highland	1			
5441		marston	4			
5441	N CLAYTON	elyria-swanse	2			
5312	16TH ST / W	cbd	6			
2304	136 S EMER	speer	3			
1316	4116 N HAL	gateway-gree	5			
2304	2300 BLK S	harvey-park	4			
2205	7800 E SMIT	stapleton	5			
3512	757 E 20TH	five-points	6			
5213	14000 BLK E	montbello	5			
2404	1400 BLK N	montclair	2			
5441	W 38TH AVE	west-highland	1			
5401	4151 E COLI	south-park-hi	2			
2202	219 N GAYL	country-club	3			
5441	1504 N COLI	south-park-hi	2			
4899	1000 E COLI	capitol-hill	6			
2202	2749 WALN	five-points	2			
5312	1000 CHOPP	auraria	1			
5441		westwood	4			
2404	2909 W 7TH	sun-valley	1			
5441	E VIRGINIA	windsor	3			
5707	792 S SHERI	washington-p	3			
5401	W ASBURY	overland	3			
2404	W 21ST AVE	jefferson-parl	1			
5441	22ND ST / L	five-points	6			
5499	E 56TH AVE	gateway-gree	5			
2304	600 BLK W	baker	3			
5441	E MLK BLV	north-park-hi	2			
5441	E 38TH AVE	stapleton	5			
5401	125 HWYSB	globeville	1			
5213	1700 BLOCK	cole	2			
2308	1975 S COLI	university-pa	3			
5441		westwood	4			
5441	E FLORIDA	virginia-villa	3			
2205	3800 N MON	northeast-par	2			
2999	1600 CALIF	cbd	6			
1315	3600 N HAV	stapleton	5			
2404	2055 S ONEI	virginia-villa	3			
2589	825 S QUITN	westwood	4			
2399	1300 W COL	lincoln-park	1			
2999	1335 N KNO	west-colfax	1			
5499	2500 BLOCK	north-park-hi	2			
2304	2930 W ASB	college-view-	4			
2305	00 BLK N C	speer	3			
1315	N HAVANA	montbello	5			
2404	5000 BLK N	montbello	5			

5499		capitol-hill	6			
3599		highland	1			
5401		five-points	6			
5707	1501 S LOGA	platt-park	3			
2404	4200 BLK W	berkeley	1			
3510	1400 BLOCK	capitol-hill	6			
5401	S FEDERAL	harvey-park	4			
5441	1100 BLOCK	capitol-hill	6			
5707	601 N LIPAN	lincoln-park	1			
5441	E MLK BLV	north-park-hi	2			
2304	16505 E GVI	gateway-gree	5			
5312	1530 N PEAL	north-capitol-	6			
2399	4498 N SHEH	berkeley	1			
4104	W ALAMED	baker	3			
1313	1500 BLK C	cbd	6			
1313	1000 CHOPP	auraria	1			
2404	600 BLOCK	villa-park	1			
2305	3121 S TAM	hampden	3			
2404	1090 S PARK	windsor	3			
5401	2100 BLK N	five-points	6			
2304	4701 W 1ST	barnum-west	4			
5441	I25 HWYNB	highland	1			
2305	3550 W 13TH	west-colfax	1			
5441	N DELAWAR	lincoln-park	1			
2204	3142 W AVC	west-colfax	1			
5499	E 29TH AVE	north-park-hi	2			
5441	I70 HWYWB	berkeley	1			
2799	7020 N TOW	dia	5			
2399	7930 E NOR	stapleton	5			
2404	10150 E VIR	windsor	3			
3510	W 39TH AVI	sunnyside	1			
5441	N CLARKSO	five-points	6			
1102		lincoln-park	1			
2399	754 N LIPAN	lincoln-park	1			
2304	1503 S LOCU	virginia-villa	3			
5203		bear-valley	4			
5016	1566 N WAS	north-capitol-	6			
2404	W 7TH AVE	villa-park	1			
2303	323 S BROA	baker	3			
5441	4300 BLOCK	hale	2			
5401	E BELLEVIE	hampden-sou	3			
5016	9999 E YAL	hampden	3			
2404	4600 BLK N	elyria-swanse	2			
2404	2900 BLK W	highland	1			
5707	N SPEER BL	auraria	1			
2303	705 S COLO	belcaro	3			
1316	1755 BLAKE	union-station	6			
2305	3600 BLK N	highland	1			
3550		sunnyside	1			
5441	W IOWA AV	overland	3			
2303	7757 E 36TH	stapleton	5			
1102		north-capitol-	6			
2404	8694 E 48TH	stapleton	5			
2609	14050 E MA	montbello	5			
2404	4000 BLK N	berkeley	1			
2399	7755 E QUIN	hampden-sou	3			

2399	4432 N CEY	gateway-gree	5			
2305	5000 BLK N	montbello	5			
5499	W KENTUCK	westwood	4			
5707	290 PARK A	five-points	6			
2202	4239 N SHO	sunnyside	1			
2404	3480 PARK	globeville	1			
2304	3633 N LAF	cole	2			
2305	8694 E 48TH	stapleton	5			
1315	1200 BLOCK	west-colfax	1			
2202	3432 W 25TH	sloan-lake	1			
2305	1701 PLATT	highland	1			
4803	1200 BLOCK	five-points	2			
5499	3200 BLOCK	northeast-par	2			
2404	8700 BLK E	stapleton	5			
3605		bear-valley	4			
1313	2121 CHILD	jefferson-par	1			
5401	9123 E MISS	windsor	3			
5441	W 6TH AVE	baker	3			
2404	4400 BLK N	montbello	5			
1208		globeville	1			
5707	1112 N BRO	capitol-hill	6			
2202	240 S MONA	hilltop	3			
2303	1505 S COL	cory-merrill	3			
5499	E ALAMEDA	washington-v	3			
2404	W 14TH AV	lincoln-park	1			
1102		cbd	6			
2204	1350 N FILL	congress-par	2			
2305	8600 BLK E	hampden-sou	3			
5441	1500 BLOCK	platt-park	3			
2308	4405 S QUE	hampden-sou	3			
2404	3850 N PEO	stapleton	5			
3504	2600 BLOCK	wellshire	3			
3571	N BROADWA	civic-center	6			
5441	900 BLOCK	hale	2			
5212	E 12TH AVE	civic-center	6			
2305	2312 N RAL	sloan-lake	1			
5441	4075 N COL	elyria-swans	2			
2999		barnum	4			
2999	200 BLK N S	cherry-creek	3			
2404	845 N DECA	sun-valley	1			
3530	500 BLK E C	north-capitol	6			
5441	S COLORAD	university-pa	3			
5401	14TH ST / A	cbd	6			
5401	E 9TH AVE	hale	2			
5441	6500 BLOCK	goldsmith	3			
1313	1201 E COL	city-park-wes	6			
3512		sunnyside	1			
2404	5300 BLK N	montbello	5			
2204	5439 N DAN	gateway-gree	5			
2404	1000 BLK N	villa-park	1			
2305	3400 BLK W	west-highland	1			







	1212	Carjacking - a	Robbery	1	0
	1299	Robbery - re	Robbery	1	0
	1301	Assault causin	Aggravated A	1	0
	1302	Assault causin	Aggravated A	1	0
	1303	Assault causin	Aggravated A	1	0
	1304	Assault causin	Aggravated A	1	0
	1305	Assault causin	Aggravated A	1	0
	1306	Assault causin	Aggravated A	1	0
	1310	Assault causin	All Other Crim	1	0
	1311	Assault causin	All Other Crim	1	0
	1312	Assault causin	All Other Crim	1	0
	1313	Assault causin	Other Crimes	1	0
	1314	Assault causin	Aggravated A	1	0
	1315	Assault causin	Aggravated A	1	0
	1316	Threatening t	Public Disord	1	0
	2005	Arson of a bu	Arson	1	0
	2006	Arson of a re	Arson	1	0
	2007	Arson	Arson	1	0
	2009	Arson to a pu	Arson	1	0
	2099	Arson of a ve	Arson	1	0
	2101	Extort-threate	All Other Crim	1	0
	2199	Extortion - of	All Other Crim	1	0
	2201	Burglary of a	Burglary	1	0
	2202	Burglary of a	Burglary	1	0
	2203	Burglary of a	Burglary	1	0
	2204	Burglary of a	Burglary	1	0
	2205	Burglary of a	Burglary	1	0
	2206	Possession of	Burglary	1	0
	2299	Burglary - ot	Burglary	1	0
	2301	Pocketpicking	Larceny	1	0
	2302	Purse snatchin	Larceny	1	0
	2303	Shoplifting	Larceny	1	0
	2304	Theft of parts	Theft from M	1	0
	2305	Theft of item	Theft from M	1	0
	2307	Theft from a	Larceny	1	0
	2308	Theft from a	Larceny	1	0
	2309	Theft from a	Larceny	1	0
	2310	Theft from a	Larceny	1	0
	2311	Theft from a	Larceny	1	0
	2399	Theft - other	Larceny	1	0
	2402	Vehicle stoler	Theft from M	1	0
	2404	Motor vehicle	Auto Theft	1	0
	2411	Unauthorized	Auto Theft	1	0
	2501	Forgery of ch	White Collar	1	0
	2503	Counterfeitin	White Collar	1	0
	2504	Passing forge	White Collar	1	0
	2505	Passing count	White Collar	1	0
	2506	Possession of	White Collar	1	0
	2507	Possession of	White Collar	1	0
	2508	Possession of	White Collar	1	0
	2589	Forgery - oth	White Collar	1	0
	2601	Theft by con	White Collar	1	0
	2602	Theft of renta	White Collar	1	0
	2604	Identity theft	White Collar	1	0
	2605	Unauthorized	White Collar	1	0
	2606	Fraud by che	White Collar	1	0









**Exercise 4. Based on data in Sheet "3" create dropdown list of IDs (unique) in red cell and fill green cell with formula which counts the number of such crime type in the dataset:**

<b>id</b>	<b>count id</b>

**Exercise 5. Based on data in Sheet "3" fill the table below (type ONE formula in red cell, then, drag and drop):**

<b>INCIDENT</b>	<b>OFFENSE CODE</b>	<b>NEIGHBORHOOD ID</b>	<b>DISTRICT ID</b>
E 6TH AVE			
1350 W COL			
2700 BLOCK			
1200 BLOCK			
W ASBURY			

**Exercise 6. Fill table with MONTHLY mortgage payments (use formulas for loan; make sensitivity a**

Mortgage (loan) 3 000 000 ₺

Assume all monthly payments paid at the end of the month

Numbers have to be rounded to integer. Example: 10 000

Fill with monthly payments		YEARS				
		5	10	15	20	25
ANNUAL RATE	7.00%					
	7.25%					
	7.50%					
	7.75%					
	8.00%					
	8.25%					
	8.50%					
	8.75%					
	9.00%					
	9.25%					
	9.50%					
	9.75%					
	10.00%					



**Exercise 7. Calculate number of Saturdays + Sundays for each month**  
**Hint: You can use supported columns and also "=NETWORKDAYS" and "=EOMONTH" with "0" option functions**

<b>Month, Year</b>	<b>Saturdays + Sundays</b>
Feb, 2017	
Jun, 2015	
Mar, 2019	
Feb, 2015	
Sep, 2015	
Oct, 2018	
Jul, 2019	
Jan, 2016	
Nov, 2016	
Jan, 2016	
Apr, 2019	
Jun, 2018	
Sep, 2019	
Jul, 2019	
Jan, 2015	
Jan, 2019	
Dec, 2016	
Mar, 2016	

**Exercise 8. Create table and match the data. Merge the dataset from the right to the dataset from the left. Replace "N/A" by 'MISSING' with formula.**

Rank 2018;Country;Value 2018;Score 2018;Rank 2013;Score 2013

1;Singapore;2.2;100  
2;Hong Kong (China);2.2;99.32  
3;New Zealand;2;96.35  
4;Netherlands;2;94.76  
5;Switzerland;1.9;93.11  
6;Australia;1.9;92.73  
7;Sweden;1.9;91.63  
8;Finland;1.8;90.69  
9;Germany;1.8;90.68  
10;United Kingdom;1.8;89.24  
11;Ireland;1.7;88.73  
12;Canada;1.7;88.68  
13;Luxembourg;1.7;88.25  
14;Estonia;1.7;87.63  
15;Norway;1.7;87.63  
16;Denmark;1.6;84.48  
17;United States of America;1.5;82.48  
18;Austria;1.4;81.02  
19;Japan;1.4;80.71  
20;Chile;1.4;79.29  
21;Belgium;1.3;78.47  
22;Israel;1.3;77.75  
23;Iceland;1.3;76.83  
24;Malta;1.2;73.75  
25;Lithuania;1.1;73.22  
26;Korea, Republic of;1.1;72.66  
27;Latvia;1.1;71.79  
28;France;1.1;71.53  
29;Cyprus;1.1;71.08  
30;Mauritius;1;70.49

Rank 2013	Country	Score 2013
1	Norway	100
2	Finland	99.84
3	Sweden	99.6
4	New Zealand	98.03
5	Denmark	97.3
6	Austria	97.05
7	Netherlands	97.04
8	Switzerland	96.23
9	Luxembourg	95.18
10	Singapore	95.14
11	Canada	94.61
12	Australia	94.41
13	Ireland	93.97
14	United Kingdom	92.87
15	Iceland	92.38
16	Germany	91.43
17	United States of America	90.53
18	Hong Kong (China)	89.2
19	France	85.75
20	Belgium	84.76
21	Chile	83.98
22	Malta	83.11
23	Japan	82.78
24	Estonia	77.38
25	Cyprus	75.78
26	Spain	75.08
27	Portugal	74.95
28	Qatar	74.78
29	Czech Republic	74.06
30	Barbados	73.72

Product	Sales	Region	Year	Online Sales Available
Automotive & Powersports	509	CEE	2010	No
Baby Products (Excluding Apparel)	582	America	2011	No
Beauty	162	DOS	2012	No
Books	652	Africa	2013	Yes
Business Products (B2B)	945	CEE	2010	Yes
Automotive & Powersports	205	America	2011	No
Baby Products (Excluding Apparel)	268	DOS	2012	No
Beauty	984	Africa	2013	Yes
Books	326	CEE	2010	Yes
Business Products (B2B)	459	America	2011	No
Automotive & Powersports	355	DOS	2012	No
Baby Products (Excluding Apparel)	798	Africa	2013	No
Beauty	679	CEE	2010	No
Books	41	America	2011	No
Business Products (B2B)	912	DOS	2012	No
Automotive & Powersports	924	Africa	2013	Yes
Baby Products (Excluding Apparel)	784	CEE	2010	Yes
Beauty	386	America	2011	No
Books	935	DOS	2012	No
Business Products (B2B)	217	Africa	2013	Yes
Automotive & Powersports	740	CEE	2010	Yes
Baby Products (Excluding Apparel)	126	America	2011	No
Beauty	684	DOS	2012	No
Books	964	Africa	2013	Yes
Business Products (B2B)	162	CEE	2010	Yes
Automotive & Powersports	825	America	2011	No
Baby Products (Excluding Apparel)	212	DOS	2012	No
Beauty	315	Africa	2013	Yes
Books	152	CEE	2010	Yes
Business Products (B2B)	984	America	2011	No
Automotive & Powersports	380	DOS	2012	No
Baby Products (Excluding Apparel)	764	Africa	2013	Yes
Beauty	438	CEE	2010	Yes
Books	352	America	2011	No
Business Products (B2B)	211	DOS	2012	No
Automotive & Powersports	415	Africa	2013	Yes
Baby Products (Excluding Apparel)	111	CEE	2010	Yes
Beauty	918	America	2011	No
Books	149	DOS	2012	No
Business Products (B2B)	13	Africa	2013	Yes
Automotive & Powersports	377	CEE	2010	Yes
Baby Products (Excluding Apparel)	804	America	2011	No
Beauty	491	DOS	2012	No
Books	10	Africa	2013	Yes
Business Products (B2B)	419	CEE	2010	Yes
Automotive & Powersports	960	America	2011	No
Baby Products (Excluding Apparel)	931	DOS	2012	No
Beauty	843	Africa	2013	Yes
Books	798	CEE	2010	Yes
Business Products (B2B)	204	America	2011	No

Automotive & Powersports	51	DOS	2012	No
Baby Products (Excluding Apparel)	475	Africa	2013	Yes
Beauty	872	CEE	2010	Yes
Books	854	America	2011	No
Business Products (B2B)	537	DOS	2012	No
Automotive & Powersports	50	Africa	2013	Yes
Baby Products (Excluding Apparel)	70	CEE	2010	Yes
Beauty	5	America	2011	No
Books	299	DOS	2012	No
Business Products (B2B)	651	Africa	2013	Yes
Automotive & Powersports	451	CEE	2010	Yes
Baby Products (Excluding Apparel)	905	America	2011	No
Beauty	93	DOS	2012	No
Books	677	Africa	2013	Yes
Business Products (B2B)	373	CEE	2010	Yes
Automotive & Powersports	883	America	2011	No
Baby Products (Excluding Apparel)	706	DOS	2012	No
Beauty	672	Africa	2013	Yes
Books	343	CEE	2010	Yes
Business Products (B2B)	670	America	2011	No
Automotive & Powersports	90	DOS	2012	No
Baby Products (Excluding Apparel)	797	Africa	2013	Yes
Beauty	289	CEE	2010	Yes
Books	195	America	2011	No
Business Products (B2B)	65	DOS	2012	No
Automotive & Powersports	889	Africa	2013	Yes
Baby Products (Excluding Apparel)	751	CEE	2010	Yes
Beauty	959	America	2011	No
Books	86	DOS	2012	No
Business Products (B2B)	895	Africa	2013	Yes
Automotive & Powersports	411	CEE	2010	Yes
Baby Products (Excluding Apparel)	478	America	2011	No
Beauty	199	DOS	2012	No
Books	961	Africa	2013	Yes
Business Products (B2B)	674	CEE	2010	Yes
Automotive & Powersports	161	America	2011	No
Baby Products (Excluding Apparel)	527	DOS	2012	No
Beauty	854	Africa	2013	Yes
Books	904	CEE	2010	Yes
Business Products (B2B)	109	America	2011	No
Automotive & Powersports	490	DOS	2012	No
Baby Products (Excluding Apparel)	665	Africa	2013	Yes
Beauty	75	CEE	2010	Yes
Books	78	America	2011	No
Business Products (B2B)	839	DOS	2012	No
Automotive & Powersports	146	Africa	2013	Yes
Baby Products (Excluding Apparel)	359	CEE	2010	Yes
Beauty	805	America	2011	No
Books	975	DOS	2012	No
Business Products (B2B)	746	Africa	2013	Yes

**Exercise 9: Make Pivot Table: rows (Product), columns (1st level - Year, 2nd level - Online Sales Available), values (Sum of Sales). Make a Slicer (Online Sales Available)**



Time	Sales
01.01.2010	\$ 21 073.00
01.04.2010	\$ 16 582.00
01.07.2010	\$ 23 378.00
01.10.2010	\$ 24 209.00
01.01.2011	\$ 20 430.00
01.04.2011	\$ 25 483.00
01.07.2011	\$ 21 852.00
01.10.2011	\$ 21 424.00
01.01.2012	\$ 26 210.00
01.04.2012	\$ 24 555.00
01.07.2012	\$ 23 831.00
01.10.2012	\$ 31 057.00
01.01.2013	\$ 29 840.00
01.04.2013	\$ 29 729.00
01.07.2013	\$ 30 865.00
01.10.2013	\$ 30 771.00
01.01.2014	\$ 27 887.00
01.04.2014	\$ 31 603.00
01.07.2014	\$ 31 361.00
01.10.2014	\$ 33 841.00
01.01.2015	\$ 34 481.00
01.04.2015	\$ 34 984.00
01.07.2015	\$ 33 833.00
01.10.2015	\$ 35 593.00
01.01.2016	\$ 34 662.00
01.04.2016	\$ 37 649.00
01.07.2016	\$ 39 017.00
01.10.2016	\$ 39 582.00
01.01.2017	\$ 40 601.00
01.04.2017	\$ 41 715.00
01.07.2017	\$ 42 176.00
01.10.2017	\$ 39 822.00

**Ex. 10. Use TWO different methods (tools/forr  
for next 1 period.**