

QUESTION 2(SUBCOUNTY_POPULATION_DENSITY)

Question 1

Write a SQL statement to display specific columns the county name, subcounty name, total population, square kilometers and population density for all records

```
371 • SHOW TABLES;
372 • SELECT county_name, subcounty_name, total, square_kms ,pop_density
373 FROM subcounty_populations_density;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	county_name	subcounty_name	total	square_kms	pop_density
▶	Mombasa	CHANGAMWE	131882	18	7457
	Mombasa	JOMVU	163415	37	4432
	Mombasa	KISAUNI	291930	88	3328
	Mombasa	LIKONI	250358	40	6187
	Mombasa	MVITA	154171	15	10543
	Mombasa	NYALI	216577	23	9610
	Kwale	KINANGO	94220	1612	58
	Kwale	LUNGA LUNGA	198423	2765	72
	Kwale	MATUGA	194252	1034	188
	Kwale	MSAMBWENI	177690	412	432
	Kwale	SAMBURU	202235	2430	83
	Kilifi	CHONYI	62335	193	324
	Kilifi	GANZE	143906	3218	45
	Kilifi	KALOLENI	193682	706	274
	Kilifi	KAUMA	22638	181	125
	Kilifi	KILIFI NORTH	178824	264	676
	Kilifi	KILIFI SOUTH	206753	290	712
	Kilifi	MAGARINI	191610	5229	37
	Kilifi	MALINDI	333226	2263	147
	Kilifi	RARAT	120813	208	581

Question 2

Write an SQL Query to display the county name, subcounty name, total, male, female sorted by female population. Subcounty with highest female population is on top

county_name	subcounty_name	total	male	female
Nairobi	EMBAKASI	988808	492476	496270
Nairobi	EMBAKASI	988808	492476	496270
Nairobi	KASARANI	780656	381234	399385
Nairobi	KASARANI	780656	381234	399385
Nairobi	NJIRU	626482	307642	318809
Nairobi	NJIRU	626482	307642	318809
Nairobi	DAGORETTI	434208	217651	216526
Nairobi	DAGORETTI	434208	217651	216526
Tharaka Nithi	THARAKANITHI	393177	193764	199406
Tharaka Nithi	THARAKANITHI	393177	193764	199406
Kiambu	RUIRU	371111	180947	190144
Kiambu	RUIRU	371111	180947	190144
Nakuru	NAIVASHA	355383	179222	176132
Nakuru	NAIVASHA	355383	179222	176132
Kilifi	MALINDI	333226	163351	169866
Kilifi	MALINDI	333226	163351	169866
Machakos	ATHI RIVER	322499	164322	158172

Question 3

Write an SQL query to calculate total population of all sub counties. (Use SQL aggregate functions)

subcounty_name	total_population
LAKE BARINGO	NULL
TINDERET FOREST	NULL
ABERDARE NATIONAL PARK	30
KAKAMEGA FOREST	34
MAU FOREST	64
ABERDARE FOREST	298
MERU NATIONAL PARK	770
MOUNT KENYA FOREST	980
MT. KENYA FOREST	1302
MT ELGON FOREST	7242
THAGICU	30272
MUTITU NORTH	42430
LAMU EAST	44516
KAUMA	45276
MUMONI	58688
BALAMBALA	64514
LOIYANGALANI	71426
LAIKIPIA NORTH	72368
KIBISH	73538
THIKA EAST	77012

Result 10 x

Question 4a

Write an SQL query that retrieves the county name, the average population density of the sub counties. Order the retrieved results by county name first and then population density descending. (Group by aggregate function)

county_name	AVG(pop_density)
Baringo	66.0000
Baringo	123.0000
Baringo	138.0000
Baringo	65.0000
Baringo	64.0000
Baringo	34.0000
Baringo	NULL
Baringo	32.0000
Bomet	417.0000

Question 4b

```

390 • SELECT county_name, AVG(pop_density)
391 FROM subcounty_populations_density
392 GROUP BY county_name
393 ORDER BY pop_density DESC;

```

Result Grid | Filter Rows: | Export:

county_name	AVG(pop_density)
Nairobi	16399.1818
Mombasa	6926.1667
Kisumu	1233.4286
Vihiga	934.8333
Kirinyaga	562.4000
Kisii	969.9091
Kakamega	673.0000
Homa Bay	410.8750
Bungoma	625.8333
Trans Nzoia	439.8000
Kericho	474.1667
Embu	459.8000
Bomet	456.0000
Migori	469.1250

Result 15 x

Question 5

Write an SQL query to retrieve rows where the subcounty is in Nyandarua county. Notice some of these subcounty is in these sub counties have typing mistakes. Update the names of the sub counties without typing mistakes. (SQL UPDATE query)

```
SET SQL_SAFE_UPDATES = 0;
```

```
UPDATE subcounty_populations_density  
SET subcounty_name = "NYANDARUA SOUTH"  
WHERE subcounty_name = "NYANDARUASOUTH";
```

```
UPDATE subcounty_populations_density  
SET subcounty_name = "NYANDARUA CENTRAL"  
WHERE subcounty_name = "NYANDARUACENTRAL";
```

```
UPDATE subcounty_populations_density  
SET subcounty_name = "NYANDARUA WEST"  
WHERE subcounty_name = "NYANDARUAWEST";
```

```
UPDATE subcounty_populations_density  
SET subcounty_name = "NYANDARUA NORTH"  
WHERE subcounty_name = "NYANDARUANORTH";
```