```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
```

1- savol Berilgan datasetdan 2 ta ixtiroiy ustunni tanlab olib (10,9) o'lchamda grafik ko'rinishini hosil qilib uni tahlil qiling

```
df = pd.read_csv("https://raw.githubusercontent.com/anvarnarz/praktikum_datasets/main/merc.csv")
df
```

	model	year	price	transmission	mileage	fuelType	tax	mpg	engineSize
0	SLK	2005	5200	Automatic	63000	Petrol	325	32.1	1.8
1	S Class	2017	34948	Automatic	27000	Hybrid	20	61.4	2.1
2	SL CLASS	2016	49948	Automatic	6200	Petrol	555	28.0	5.5
3	G Class	2016	61948	Automatic	16000	Petrol	325	30.4	4.0
4	G Class	2016	73948	Automatic	4000	Petrol	325	30.1	4.0
...	...	...	...	...	...	...	...	...	...
13114	C Class	2020	35999	Automatic	500	Diesel	145	55.4	2.0
13115	B Class	2020	24699	Automatic	2500	Diesel	145	55.4	2.0
13116	GLC Class	2019	30999	Automatic	11612	Diesel	145	41.5	2.1
13117	CLS Class	2019	37990	Automatic	2426	Diesel	145	45.6	2.0
13118	S Class	2019	54999	Automatic	2075	Diesel	145	52.3	2.9

```
#1-savolga javob
plt.figure(figsize=(10,9))
sns.scatterplot(data=df, x='price', y='mpg')
plt.show()
```

2- savol 2 ta funksiya hosil qilib ularni grafik ko'rinishda tasvirlab, dars jarayonida aytilgan 10 ta atribut bo'yicha tahrirlang.

```
#2-savolga javob
x=np.arange(0,4*np.pi,0.1)
x
```

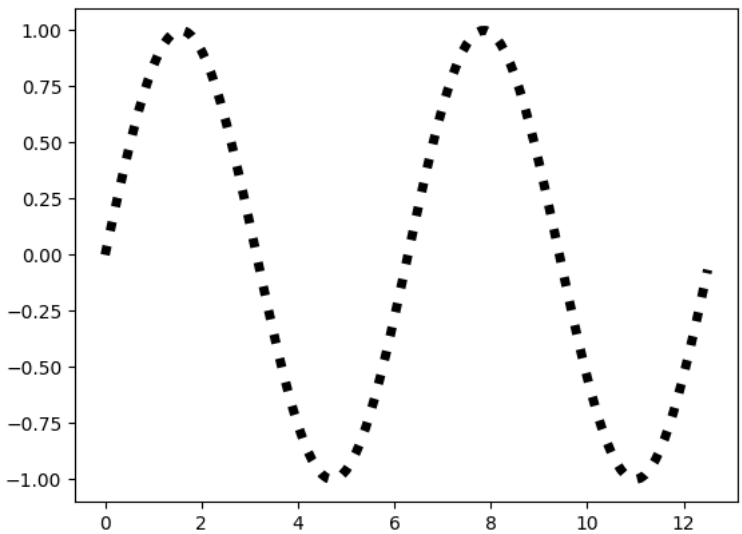
```
array([ 0. ,  0.1,  0.2,  0.3,  0.4,  0.5,  0.6,  0.7,  0.8,  0.9,  1. ,
        1.1,  1.2,  1.3,  1.4,  1.5,  1.6,  1.7,  1.8,  1.9,  2. ,  2.1,
        2.2,  2.3,  2.4,  2.5,  2.6,  2.7,  2.8,  2.9,  3. ,  3.1,  3.2,
        3.3,  3.4,  3.5,  3.6,  3.7,  3.8,  3.9,  4. ,  4.1,  4.2,  4.3,
        4.4,  4.5,  4.6,  4.7,  4.8,  4.9,  5. ,  5.1,  5.2,  5.3,  5.4,
        5.5,  5.6,  5.7,  5.8,  5.9,  6. ,  6.1,  6.2,  6.3,  6.4,  6.5,
        6.6,  6.7,  6.8,  6.9,  7. ,  7.1,  7.2,  7.3,  7.4,  7.5,  7.6,
        7.7,  7.8,  7.9,  8. ,  8.1,  8.2,  8.3,  8.4,  8.5,  8.6,  8.7,
        8.8,  8.9,  9. ,  9.1,  9.2,  9.3,  9.4,  9.5,  9.6,  9.7,  9.8,
        9.9, 10. , 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9,
       11. , 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 12. ,
       12.1, 12.2, 12.3, 12.4, 12.5])
```

```
y=np.sin(x)
y
```

```
array([ 0.        ,  0.09983342,  0.19866933,  0.29552021,  0.38941834,
        0.47942554,  0.56464247,  0.64421769,  0.71735609,  0.78332691,
        0.84147098,  0.89120736,  0.93203909,  0.96355819,  0.98544973,
        0.99749499,  0.9995736 ,  0.99166481,  0.97384763,  0.94630009,
        0.90929743,  0.86320937,  0.8084964 ,  0.74570521,  0.67546318,
        0.59847214,  0.51550137,  0.42737988,  0.33498815,  0.23924933,
        0.14112001,  0.04158066, -0.05837414, -0.15774569, -0.2555411 ,
       -0.35078323, -0.44252044, -0.52983614, -0.61185789, -0.68776616,
       -0.7568025 , -0.81827711, -0.87157577, -0.91616594, -0.95160207,
       -0.97753012, -0.993691  , -0.99992326, -0.99616461, -0.98245261,
       -0.95892427, -0.92581468, -0.88345466, -0.83226744, -0.77276449,
       -0.70554033, -0.63126664, -0.55068554, -0.46460218, -0.37387666,
       -0.2794155 , -0.1821625 , -0.0830894 ,  0.0168139 ,  0.1165492 ,
        0.21511999,  0.31154136,  0.40484992,  0.49411335,  0.57843976,
        0.6569866 ,  0.72896904,  0.79366786,  0.85043662,  0.8987081 ,
        0.93799998,  0.96791967,  0.98816823,  0.99854335,  0.99894134,
        0.98935825,  0.96988981,  0.94073056,  0.90217183,  0.85459891,
        0.79848711,  0.7343971 ,  0.66296923,  0.58491719,  0.50102086,
        0.41211849,  0.31909836,  0.22288991,  0.12445442,  0.02477543,
       -0.07515112, -0.17432678, -0.27176063, -0.36647913, -0.45753589,
       -0.54402111, -0.62507065, -0.69987469, -0.76768581, -0.82782647,
       -0.87969576, -0.92277542, -0.95663502, -0.98093623, -0.99543625,
       -0.99999021, -0.99455259, -0.97917773, -0.95401925, -0.91932853,
       -0.87545217, -0.82282859, -0.76198358, -0.69352508, -0.61813711,
       -0.53657292, -0.44964746, -0.35822928, -0.26323179, -0.16560418,
       -0.0663219 ])
```

3-savol Hosil bo'lgan datasetni githubdagi profilingizga yuklang

```
#3-savolga javob
plt.plot(x,y, linewidth=5, linestyle=":", color="black")
plt.show()
```



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