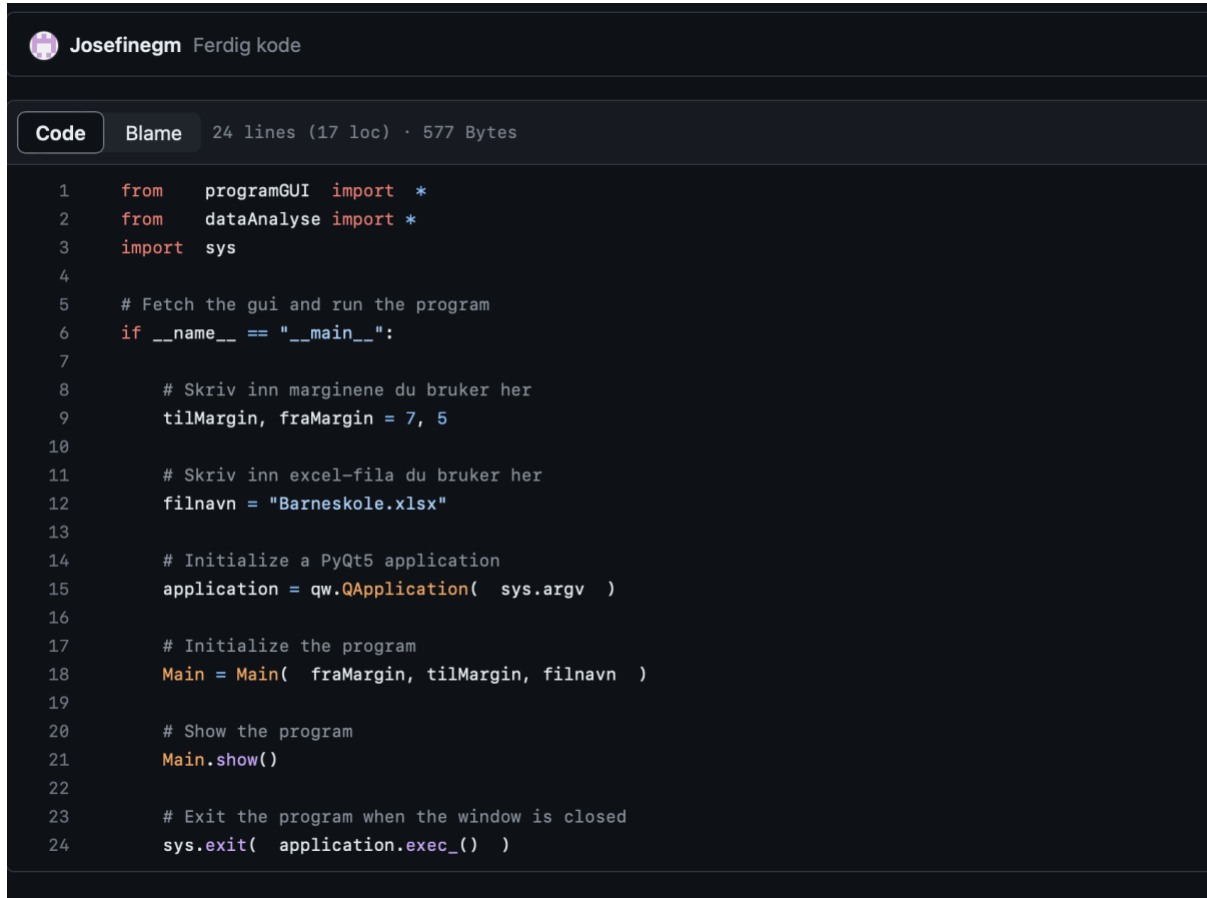


## Vedlegg 1: Python script

Hele scriptet finnes på: <https://github.com/Josefinegm/Master/tree/main>



The screenshot shows a GitHub interface for a repository named 'Josefinegm'. The file is titled 'Ferdig kode'. The code is displayed in a dark-themed editor with line numbers from 1 to 24. The script imports 'programGUI' and 'dataAnalyse' modules, and uses 'sys' for system-level operations. It includes comments in Norwegian explaining the purpose of various steps, such as setting margins, specifying an Excel file, initializing a PyQt5 application, and showing the program window. The script concludes by exiting the program when the window is closed.

```
1  from    programGUI import *
2  from    dataAnalyse import *
3  import  sys
4
5  # Fetch the gui and run the program
6  if __name__ == "__main__":
7
8      # Skriv inn marginene du bruker her
9      tilMargin, fraMargin = 7, 5
10
11     # Skriv inn excel-fila du bruker her
12     filnavn = "Barneskole.xlsx"
13
14     # Initialize a PyQt5 application
15     application = QApplication( sys.argv )
16
17     # Initialize the program
18     Main = Main( fraMargin, tilMargin, filnavn )
19
20     # Show the program
21     Main.show()
22
23     # Exit the program when the window is closed
24     sys.exit( application.exec_() )
```

## Vedlegg 2: Regresjon

### Lineær regresjon

```
. reg Elsparkesykler Passasjereravpå TemperaturC Middelvindms Nedbørmmtime i.måned
```

Source	SS	df	MS	Number of obs	=	36,108
Model	96.5487958	11	8.77716325	F(11, 36096)	=	93.75
Residual	3379.33278	36,096	.0936207	Prob > F	=	0.0000
				R-squared	=	0.0278
				Adj R-squared	=	0.0275
Total	3475.88158	36,107	.096266142	Root MSE	=	.30597

Elsparkesykler	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Passasjereravpå	.0026631	.0001067	24.95	0.000	.0024539	.0028724
TemperaturC	.0025821	.000446	5.79	0.000	.0017079	.0034563
Middelvindms	.0010659	.0010375	1.03	0.304	-.0009676	.0030995
Nedbørmmtime	-.0082617	.0029269	-2.82	0.005	-.0139986	-.0025249
måned						
5	.0236609	.0068433	3.46	0.001	.0102478	.037074
6	.0406899	.008019	5.07	0.000	.0249723	.0564074
7	.0560998	.0081648	6.87	0.000	.0400966	.072103
8	.0519246	.0081512	6.37	0.000	.035948	.0679012
9	.0466472	.0069696	6.69	0.000	.0329866	.0603078
10	.0289731	.0065546	4.42	0.000	.0161259	.0418203
11	.0275246	.0066319	4.15	0.000	.0145258	.0405233
_cons	-.0415473	.0067823	-6.13	0.000	-.0548409	-.0282538

Test av lineær regresjon:

1) heterokedasticity problem	<b>Breusch-Pagan hettest</b> Chi2(1): 7450.349 p-value: 0.000	<b>&gt; 0.05</b>
2) no multicollinearity problem	<b>Variance inflation factor</b> Sommer : 2.04 TemperaturC : 2.04 Passasjereravp�� : 1.03 Middelvindms : 1.03 helg : 1.01 Nedb��rmtime : 1.00	<b>&lt; 5.00</b>
3) residuals are not normally distributed	<b>Shapiro-Wilk W normality test</b> z: 24.919 p-value: 0.000	<b>&gt; 0.01</b>
4) specification problem	<b>Linktest</b> t: 4.017 p-value: 0.000	<b>&gt; 0.05</b>
5) functional form problem	<b>Test for appropriate functional form</b> F(3,36251):7.710 p-value: 0.000	<b>&gt; 0.05</b>
6) no influential observations	<b>Cook's distance</b> no distance is above the cutoff	<b>&lt; 1.00</b>

Goodness-of-fit(gof) test:

**Logistic model for logit\_elspark1, goodness-of-fit test**

```

number of observations =      5612
number of covariate patterns =    5611
Pearson chi2(5597) =    5370.80
Prob > chi2 =      0.9847

```

Variance Inflation Factor (VIF) test:

**. vif**

Variable	VIF	1/VIF
Passasjere~å	<b>1.18</b>	<b>0.845332</b>
TemperaturC	<b>2.95</b>	<b>0.338555</b>
Middelvindms	<b>1.11</b>	<b>0.902297</b>
Nedbørmmtime	<b>1.01</b>	<b>0.989650</b>
Helg	<b>1.02</b>	<b>0.985141</b>
Rushtid2	<b>1.02</b>	<b>0.983353</b>
måned		
5	<b>2.00</b>	<b>0.500509</b>
6	<b>2.69</b>	<b>0.372062</b>
7	<b>2.92</b>	<b>0.342707</b>
8	<b>2.88</b>	<b>0.347659</b>
9	<b>2.03</b>	<b>0.491967</b>
10	<b>1.83</b>	<b>0.547303</b>
11	<b>1.81</b>	<b>0.553287</b>
Mean VIF	<b>1.88</b>	