assignment3(APL)

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1 .Introduction: This week's assignment starts with generating data as a linear combination of the Bessel Function and some noise. f(t)=A*J2(t)-B*t+n(t) where A=1.05 B=-0.105 J2(t)=Bessel function of 2nd order n(t)= Noise function

PROBLEMS(assignment):

2

loadtxt function used to import data from file.It consists of 10 columns

1st column represents time and other 9 columns represent functions with varying noise

```
data=np . l o a d t x t ( " f i t t i n g . dat " )
x=data [ : , 0 ]
y=data [ : , 1 : ]
```

3,4

original function with A=1.05,B=0.105 and plots generated from data are plotted

5

errorbars are represented by red dots

data to be fitted theory: f(t)+n versus time

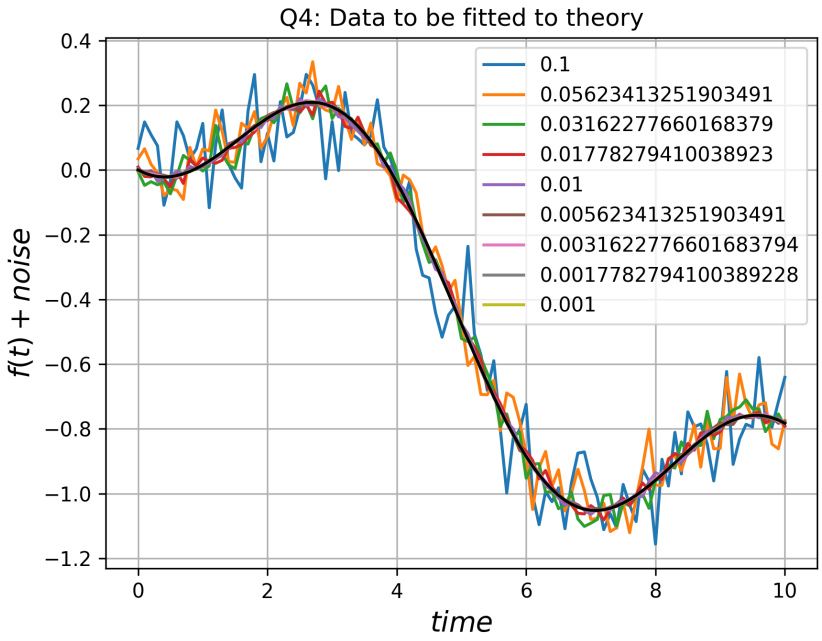

Figure 1: Caption

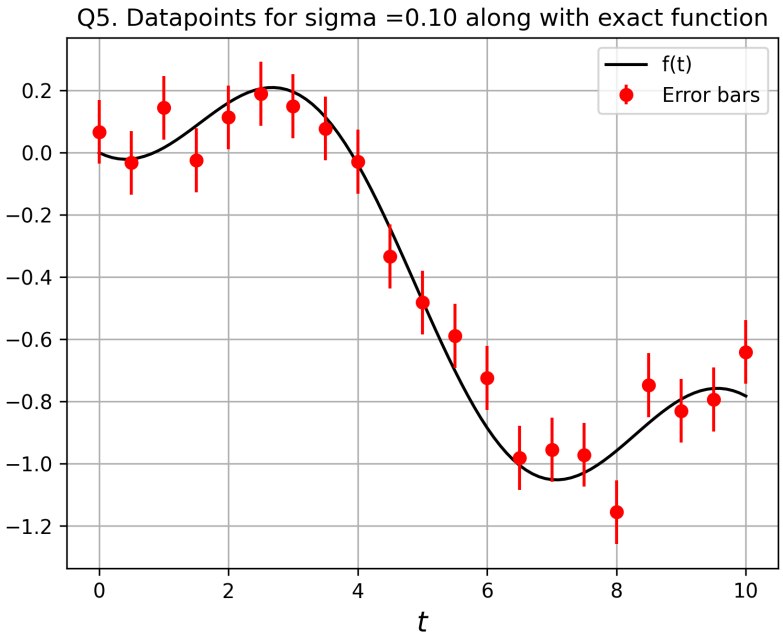

Figure 2: Caption

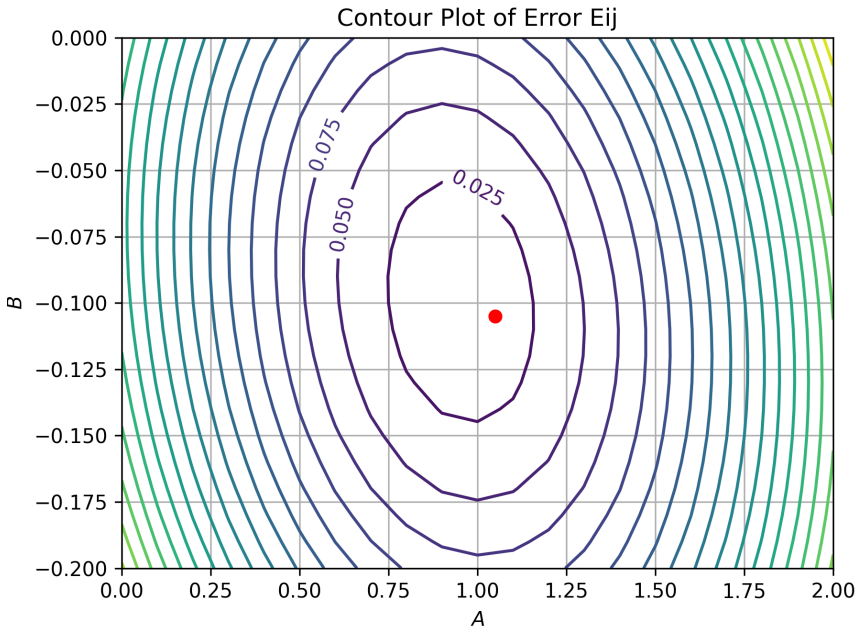

Figure 3: Caption

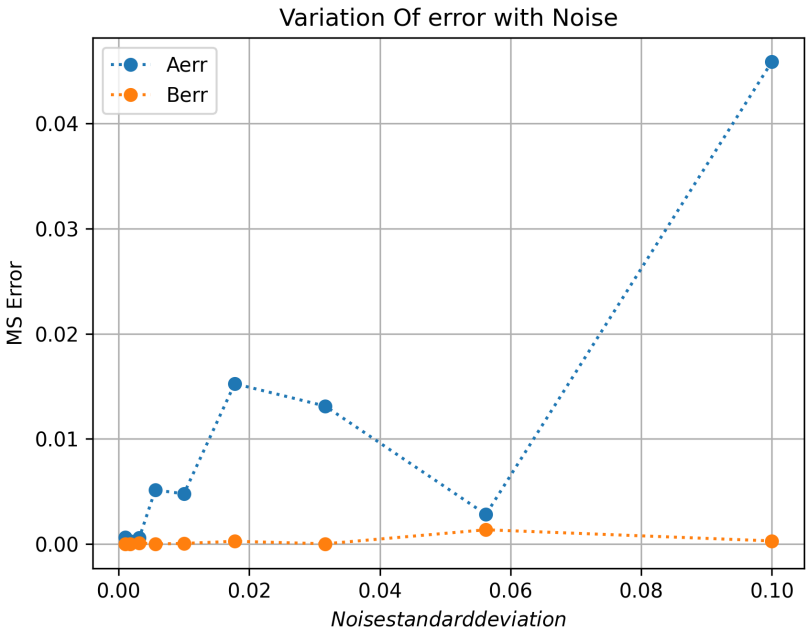

Figure 4: Caption

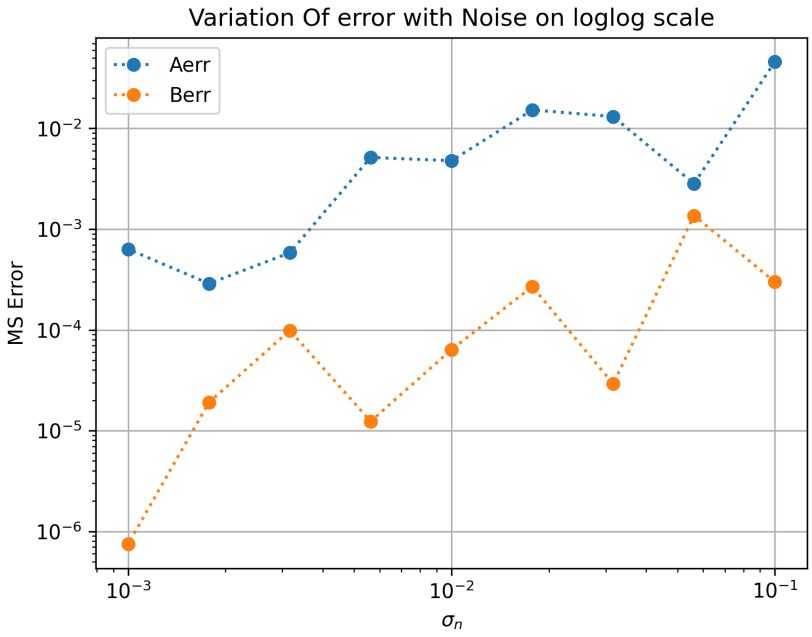

Figure 5: Caption