Wire [Laser λ = 650 nm]						
D (cm)	**m**	**Outer (cm)**	**Inner (cm)**	**x_m (cm)**	**b (mm)**	**Average b (mm)**
100	1	0.824	0.688	0.756	0.1720±0.0017	**0.15181±0.00047**
	2	1.884	1.668	1.776	0.1464±0.0015	
	3	2.660	2.488	2.574	0.1515±0.0015	
110	1	1.200	0.752	0.976	0.1465±0.0013	
	2	1.992	1.722	1.857	0.1540±0.0014	
	3	2.894	2.656	2.775	0.1546±0.0014	
120	1	1.210	0.910	1.060	0.1472±0.0012	
	2	2.256	1.976	2.116	0.1474±0.0012	
	3	3.270	3.110	3.190	0.1467±0.0012	

Slit [b = 0.2 mm]						
D (cm)	**m**	**Outer (cm)**	**Inner (cm)**	**x_m (cm)**	**λ (nm)**	**Average λ (nm)**
100	1	0.726	0.540	0.633	633.0±6.5	**684.8±2.7**
	2	1.500	1.286	1.393	696.5±7.0	
	3	2.178	1.982	2.080	693.3±6.9	
110	1	0.880	0.636	0.758	689.1±6.4	
	2	1.620	1.426	1.523	692.3±6.3	
	3	2.442	2.210	2.326	704.8±6.4	

```
import numpy as np
from uncertainties import unumpy as unp
from uncertainties import ufloat

filename = "Slit"
f = np.loadtxt(f"{filename}.csv", delimiter = ",", skiprows = 1)

# D measured with normal ruler
D = unp.uarray(f[:,0], 1)             # Distance from slit to screen (cm)

m = f[:,1]                            # Order of dark fringe

# Inner and Outer distances between borders of dark fringes
# measured with Vernier Callipers
Outer = unp.uarray(f[:,2], 0.002)     # Distance between outer lines (cm)
Inner = unp.uarray(f[:,3], 0.002)     # Distance between inner lines (cm)

given_lambda = 650      # nm
given_slit_b = 0.2      # mm

xm = (Inner + Outer)/2

if (filename == "Wire"):        # Calculate Wire Thickness b
    wire_b = (2*m*given_lambda*1e-9*D*1e3)/xm       # mm
    object = wire_b
else:                           # Calculate Laser Wavelength Lambda
    calculated_lambda = (given_slit_b*1e-3*xm*1e9)/(2*D*m)   # nm
    object = calculated_lambda

for i in range(len(object)):    # Print all values
    print("{:.2uP}".format(object[i]))

print("Average = {:.2uP}".format(np.mean(object)))
```