

Number Frequency Distribution

Frequency distribution of Irrational number square root

```
import decimal
from collections import Counter
import matplotlib.pyplot as plt
import seaborn as sns
def Frequency(number, digits):
    d2 = decimal.Decimal(number)
    d = decimal.Context(prec = digits)
    value = d2.sqrt(d)
    div= str(value).split('.')
    vad = div[1]
    splt = [int(i) for i in str(vad)]
    v = Counter(splt)
    color = sns.color_palette("magma",len(v.keys()))
    gr = plt.bar(v.keys(),v.values(), color = color)
    plt.bar_label(gr, label = v.values(),label_type="center", rotation = 90)
    plt.axhline(y = digits//10, color = "red")
    plt.title("Frequency barplot")
    plt.xlabel("Digits")
    plt.ylabel("Count")
    plt.xticks([0,1,2,3,4,5,6,7,8,9])
    plt.show()
```

```
Frequency(2,10000)
```

