

## PROBLEM SET 1 MRIDUL HARISH, CED18I034

Question 1 - Given the following setup {Class, Tally score, Frequency}, develop an application that generates the table shown; (you can populate the relevant data; minimum data size :50 records). The table is only an illustration for a data of color scores, you are free to test the application over any data set with the application generating the tally and frequency scores.

```
In [ ]: from random import randint
import collections
```

```
In [ ]: def generate_data():
    return[randint(1,10) for i in range(randint(100,200))]
```

```
In [ ]: data = generate_data()
counter = dict(sorted(collections.Counter(data).items()))
```

```
In [ ]: counter
```

```
Out[ ]: {1: 15, 2: 9, 3: 20, 4: 18, 5: 12, 6: 17, 7: 17, 8: 13, 9: 5, 10: 14}
```

```
In [ ]: print("{:<7} {:<30} {:<7}".format('Score', 'Tally', 'Frequency'))

for key, value in counter.items():
    tally = "".join("|" if i % 5 != 4 else "\ " for i in range(value))
    print("{:<7} {:<30} {:<7}".format(key, tally, value))
```

Score	Tally	Frequency
1	\     \     \	15
2	\	9
3	\     \     \     \	20
4	\     \     \	18
5	\     \	12
6	\     \     \	17
7	\     \     \	17
8	\     \	13
9	\	5
10	\     \	14