

# Data-X(IEOR 290): HW 1

Tu Ni

SID: 3032165865

## Problem 1

```
In [1]: a = list()
```

```
In [2]: a = [x/2.0 for x in range(4,93)]
```

```
In [3]: for i in range(len(a)):
        if a[i] % 2 == 0:
            a[i] *= 2
```

```
In [5]: s = 0
        for i in range(len(a)):
            if i == 31 or i == 50:
                continue
            s += a[i]
```

```
In [11]: mean = sum(a)/len(a)
```

```
In [12]: a_half = [x for x in a if (int(x) - x) != 0]
```

```
In [20]: a = sorted([x for x in a if x not in a_half]) + sorted([x for x in a
        if x in a_half])
```

```
In [22]: for i in range(len(a)):
        if i % 4 == 0:
            print(a[i])

        print(len(a_half))
        print(len(a)-len(a_half))
```

```
3.0
8.0
13.0
19.0
24.0
29.0
35.0
40.0
45.0
60.0
76.0
92.0
5.5
9.5
13.5
17.5
21.5
25.5
29.5
33.5
37.5
41.5
45.5
44
45
```

## Problem 2

```
In [40]: b = list()
```

```
In [41]: string = "I am so excited about Data-X. I feel it is important to be
         able to work with data."
         b = string.split()
```

```
In [42]: count = 0
         for word in b:
             for c in word:
                 if c == 'e':
                     count += 1
```

```
In [45]: for i in range(len(b)):
         for j in range(len(b[i])):
             if b[i][j].lower() == 'i':
                 b[i] = b[i][:j] + '1' + b[i][j+1:]
```

```
In [47]: new = "This is the end of the first HW"  
b = b + new.split()
```

```
In [52]: res = ' '.join(b)  
print (res[::-1])
```

WH tsrif eht fo dne eht si sihT .atad ht1w krow ot elba eb ot tnatrop  
m1 s1 t1 leef 1 .X-ataD tuoba detlcxe os ma 1