In [2]:
```
printmd("Avanish Singh", color='#00C5CD')
printmd("Sec. Q", color='#8FBC8F')
printmd("21", color='#8FBC8F')
```

Avanish Singh

Sec. Q

21

In [3]:
```
def cosineSimilarity(arr1,arr2):
    sum1=0
    sum2=0
    sum3=0
    for i in range(len(arr1)):
        sum1 = sum1+arr1[i]*arr2[i]
        sum2 = sum2 + arr1[i]**2
        sum3 = sum3+arr2[i]**2
    res = sum1/((sum2**0.5)*(sum3**0.5))
    return res
```

In [4]:
```
arr1 = [3,2,0,5]
arr2 = [1,0,0,0]
cosineSimilarity(arr1,arr2)
```

Out[4]:
```
0.48666426339228763
```

In [1]:
```
def jaccard_set(list1, list2):

    intersection = len(list(set(list1).intersection(list2)))
    union = (len(list1) + len(list2)) - intersection
    return float(intersection) / union

# Define two sets
a = [0, 1, 2, 5, 6]
b = [0, 2, 3, 5, 7, 9]


jaccard_set(a, b)
```

Out[1]:
```
0.375
```

In [ ]:
```

```