NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

Data Mining (LAB)

Lab Task: 03

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<u>Lab – Task</u>

Find distance based on attributes 'fav color' and 'fav food' between:

1. Ali and Bilal
2. Ali and Faris

```python
# distance

def calculate_distance(person1, person2):
    p = len(person1)
    m = 0

    for attr1, attr2 in zip(person1, person2):
        if attr1 == attr2:
            m = m+1

    distance = (p - m) / p
    return distance

ali = ['Blue', 'Cake']
bilal = ['Yellow', 'Cake']
faris = ['Yellow', 'Burger']

print('Distance between Ali and Bilal is:', calculate_distance(ali, bilal))
print('Distance between Ali and Faris is:', calculate_distance(ali, faris))
```
✓ 0.0s

```
Distance between Ali and Bilal is: 0.5
Distance between Ali and Faris is: 1.0
```