

Consider a 2D list storing student's name along with their marks. Use list comprehension to create another list comprising names of students with marks greater than 85.

```
def comprehendlist(arr):
    return [x for x in arr if x[1] > "85"]

def startingPoint():
    rows = int(input("Enter number of rows: "))
    arr=[]
    for i in range(rows):
        name = input("Enter names : ")
        marks = input("Enter marks : ")
        arr.append([name,marks])
    print(arr)
    print(comprehendlist(arr))

if __name__ == "__main__":
    startingPoint()
```

```
↳ Enter number of rows: 3
Enter names : bella
Enter marks : 86
Enter names : edward
Enter marks : 89
Enter names : matteo
Enter marks : 65
[['bella', '86'], ['edward', '89'], ['matteo', '65']]
[['bella', '86'], ['edward', '89']]
```

WAP that takes a list of marks as an input from the user and creates a dictionary storing marks and the corresponding frequency as key-value pairs.

```
def frequency(marksList):
    freq = {}
    for mark in marksList:
        if mark in freq:
            freq[mark] += 1
        else:
            freq[mark] = 1
    return freq

def startingPoint():
    marks = []
    num = int(input("Enter size of list : "))
    for _ in range(0, num):
        mark = int(input("Enter the marks : "))
```

```
marks.append(mark)
print(frequency(marks))
```

```
if __name__ == "__main__":
    startingPoint()

    Enter size of list : 6
    Enter the marks : 56
    Enter the marks : 58
    Enter the marks : 51
    Enter the marks : 53
    Enter the marks : 49
    Enter the marks : 50
    {56: 1, 58: 1, 51: 1, 53: 1, 49: 1, 50: 1}
```

WAP that takes a list of names as an input from the user and creates a dictionary storing word-length as key-value pair for each word given in the list.

```
def createDict(lst):
    res_dct = {}
    print(num)
    for i in range(0, num):
        res_dct[lst[i]] = len(lst[i])
    return res_dct

def startingPoint():
    names = []
    num = int(input("Enter total number of names: "))
    for i in range(0, num):
        name = input("Enter the name: ")
        names.append(name)
    print(names)
    print(createDict(names))

if __name__ == "__main__":
    startingPoint()

    Enter total number of names: 5
    Enter the name: swati
    Enter the name: mansi
    Enter the name: bella
    Enter the name: veronica
    Enter the name: natalia
    ['swati', 'mansi', 'bella', 'veronica', 'natalia']
    5
    {'swati': 5, 'mansi': 5, 'bella': 5, 'veronica': 8, 'natalia': 7}
```

