

# Mar12 DSA Day4

March 12, 2021

## 1 Uber Cab Searching

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[6]: class Uber:
    def __init__(self):
        self.cabs = [3, 8, 12, 13, 17, 23, 34, 47]
        return
    def bsearch(self, x):
        beg = 0
        end = len(self.cabs) - 1
        while beg <= end:
            mid = (beg + end) // 2
            if x == self.cabs[mid]:
                return mid
            elif x > self.cabs[mid]:
                beg = mid + 1
            else:
                end = mid - 1
        return -1

id = Uber()
x = int(input('Enter the cab code you are searching for: '))
pos = id.bsearch(x)
if pos == -1:
    print("No cabs nearby. Try Again")
else:
    print("Cab is", pos, "KM away from you. Arriving Soon")
```

Enter the cab code you are searching for: 37  
No cabs nearby. Try Again

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