EFFICIENCY AND NOTATION QUIZ

"""input manatees: a list of "manatees", where one manatee is represented by a dictionary

a single manatee has properties like "name", "age", et cetera

n = the number of elements in "manatees"

m = the number of properties per "manatee" (i.e. the number of keys in a manatee dictionary)"""

Example 1

```
def example1(manatees):
    for manatee in manatees:
        print manatee['name']
```

Answer : Time Complexity = O(n)

Example 2

```
def example2(manatees):
    print manatees[0]['name']
    print manatees[0]['age']
```

Answer : Time Complexity = O(1)

Example 3

```
def example3(manatees):
    for manatee in manatees:
        for manatee_property in manatee:
            print manatee_property, ": ", manatee[manatee_property]
```

Answer : Time complexity = O(n * m)

Example 4

```
def example4(manatees):
    oldest_manatee = "No manatees here!"
    for manatee1 in manatees:
        for manatee2 in manatees:
            if manatee1['age'] < manatee2['age']:
                oldest_manatee = manatee2['name']
            else:
                oldest_manatee = manatee1['name']
    print oldest_manatee
```

Answer : Time complexity = $O(n^2)$