

CS 106

Introduction to Computer Science I

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Today's Topics

- Questions / comments?
 - Anything about Friday's videos or lab work?
- Let's add the the blackjack program:
 - Ace can be 1 or 11
 - Playing against a dealer's hand and the dealer has requirements to hit on 16 or lower and stay on 17 or higher
- List comprehensions

List comprehensions

- list comprehensions
- code to build a list like the following:

```
nums1 = []  
for n in range(1,200):  
    nums1.append(n ** 2 + 4*n + 6)
```

can be replaced by:

```
nums = [n ** 2 + 4*n + 6 for n in range(1,200)]
```

List comprehensions

- filtered list comprehensions
- code to build a list like the following:

```
odd_nums1 = []  
for n in nums1:  
    if n % 2 == 1:  
        odd_nums1.append(n)
```

can be replaced by:

```
odd_nums = [n for n in nums if n % 2 == 1]
```

Programming assignment 2

- Use the remaining time to start programming assignment 2