



CL01 - Conditionals and Evaluating Expressions

Housekeeping - CQ00

- CQ00: Check/Update Canvas Email
- **DUE THURSDAY**
- *IF YOU DIDN'T GET AN EMAIL TO JOIN GRADESCOPE* you probably will have to change your email in Canvas
- IF YOU DID GET THE EMAIL, you'll just have to check a few boxes. :)

Simplify: $2 + 4 / 2 * 2$

(Reminder: P E M D A S)

Simplify: $2 + 4 / 2 * 2$

What **type** is $2 + 4 / 2 * 2$?

Simplify:

$220 \geq \text{int}(("1" + "1" + "0") * 2)$

Mods Practice! Simplify

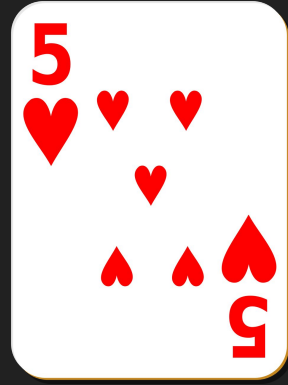
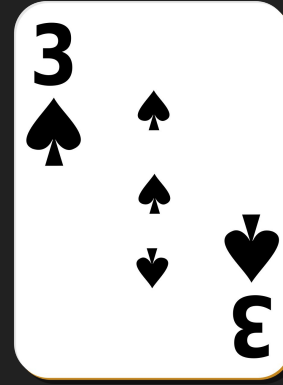
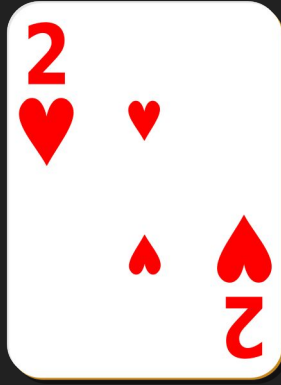
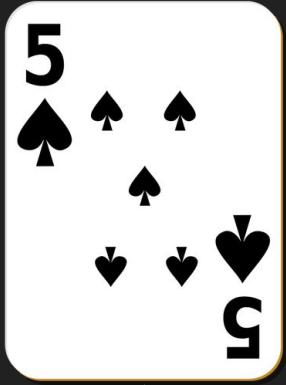
- $7 \% 2$
- $8 \% 4$
- $7 \% 4$
- Any even number $\% 2$
- Any odd number $\% 2$

Takeaways

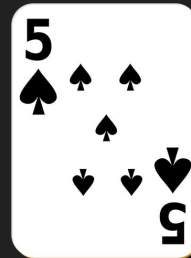
- Ordering of simplifying expressions
- How types can change when simplifying expressions
- Learning the new “mod” (%) operator

Conditionals

Recall: Finding the Lowest Card

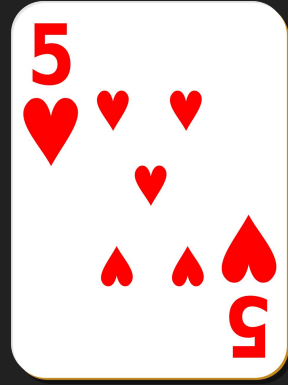
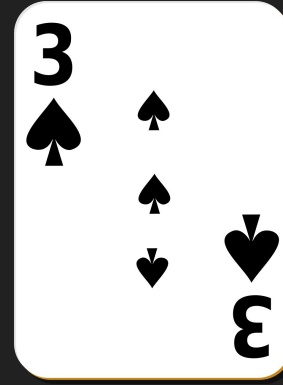
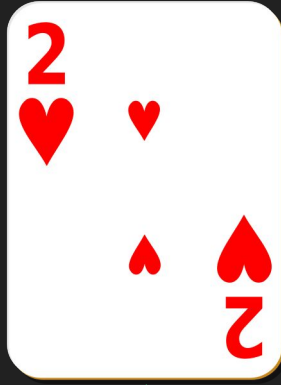
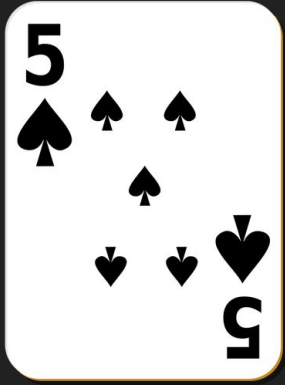


Low card:



If current card < low card,
make it the low card.

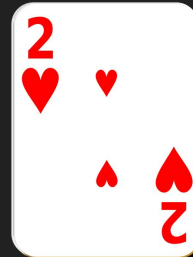
Recall: Finding the Lowest Card



$2 < 5?$

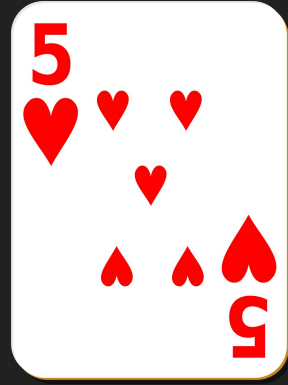
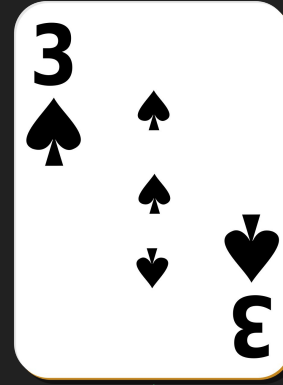
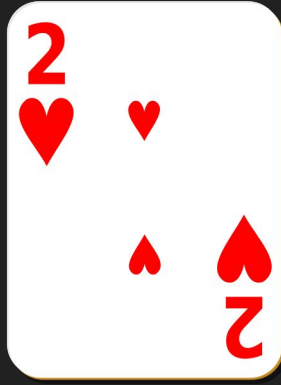
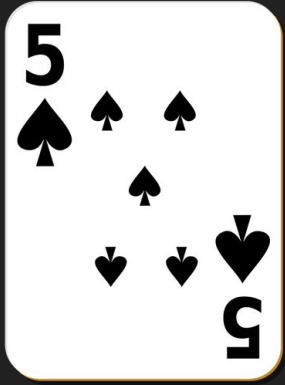


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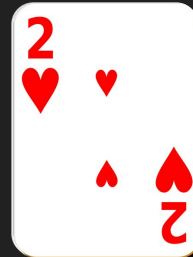
If current card $<$ low card,
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Recall: Finding the Lowest Card



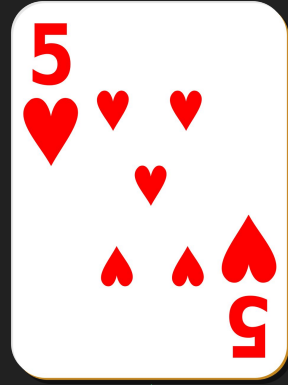
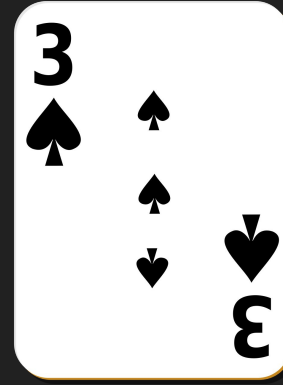
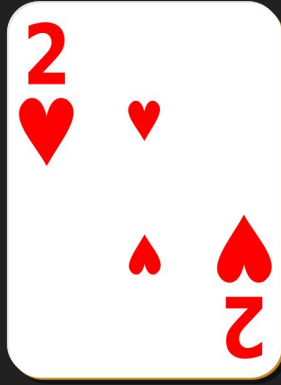
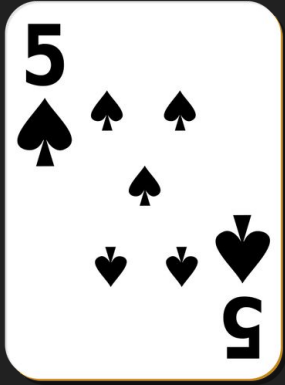
$3 < 2?$ 

Low card:



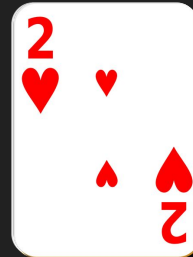
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Recall: Finding the Lowest Card



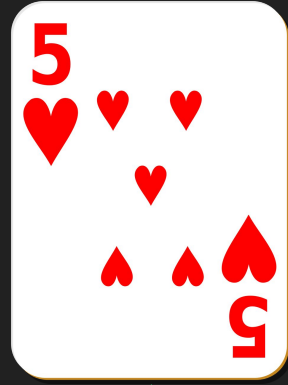
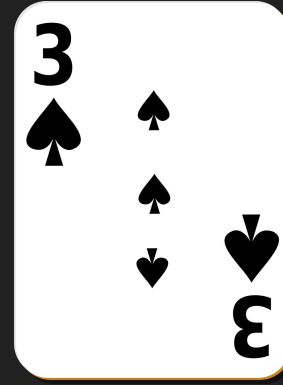
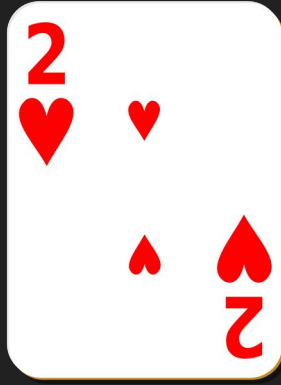
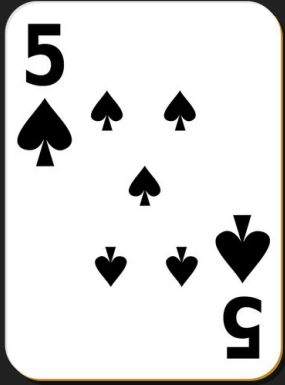
$5 < 2?$ 

Low card:



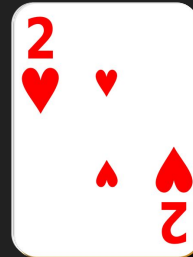
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Recall: Finding the Lowest Card



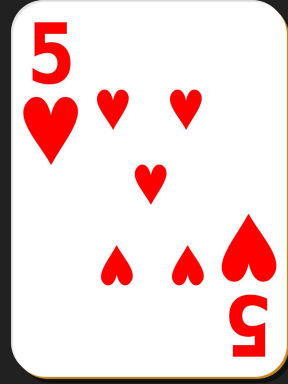
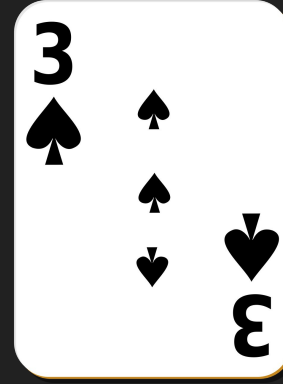
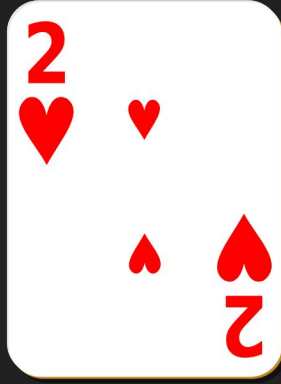
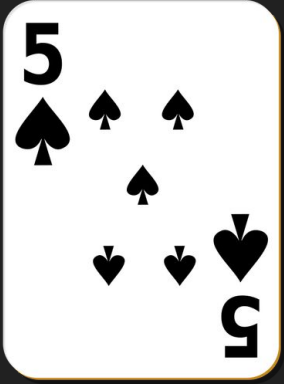
$5 < 2?$ 

Low card:

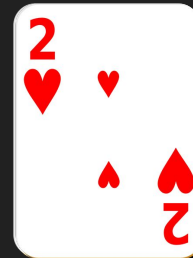


If current card $<$ low card,
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Recall: Finding the Lowest Card



Low card:



Conditional Statement



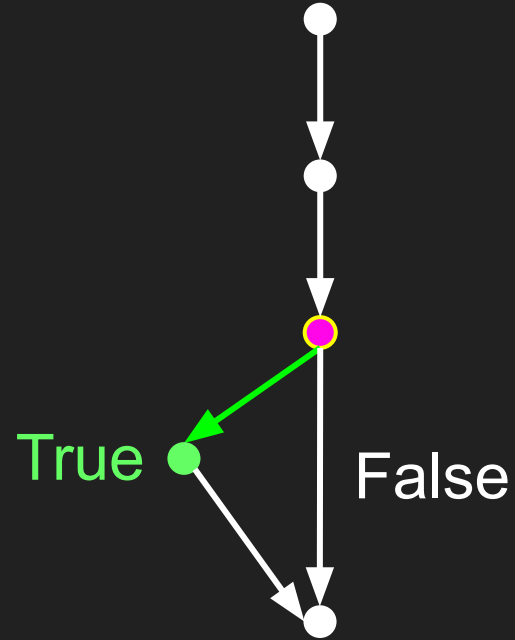
If current card < low card,
make it the low card.

Conditional Statements

if <something>: ← bool

<do something>

<rest of program>



Conditional Statements

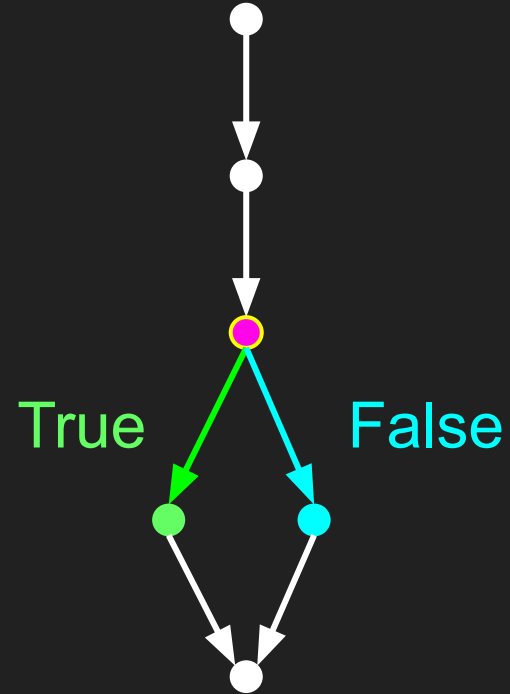
```
if <something>:
```

```
    <do something>
```

```
else:
```

```
    <do something else>
```

```
<rest of program>
```



Conditional Statements

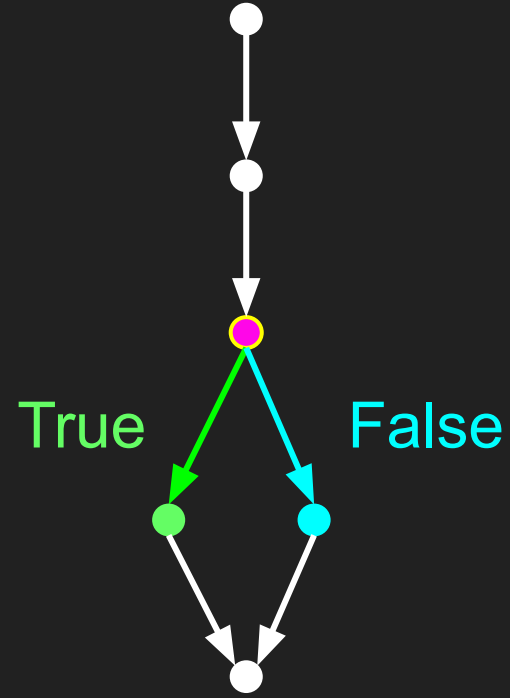
if <something>:

 <do something>

else:

 <do something else>

<rest of program>



Discussion

What is a decision you make in your day-to-day that you can express as an conditional (if-else) statement?

E.g. If I my assignment is due tomorrow, I start working on it. Else (it's not due tomorrow), I procrastinate another day.

(This is bad behavior and I don't condone it!)

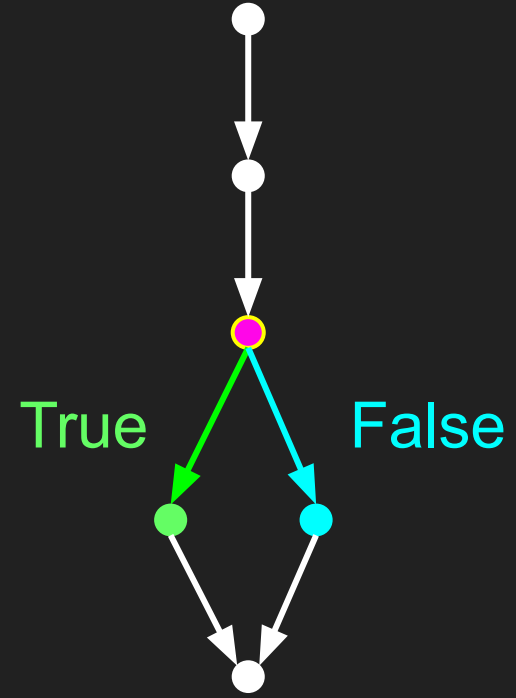
Conditional Statements

if

:



else:



Practice

Write a program that prints “Even” if my_number is even and “Odd” if my_number is odd.

(Hint: You will want to use % and the relational operator == from LS03)

```
1 my_number_string: str = input("Guess a number: ")
2 my_number: int = int(my_number_string)
3
4
5
6
```