python notes

today we learn some basics in python so i write this down so i dont forget later

data types (very important)

int

- whole number like 1 4 67

- used for counting stuff or math

float

- number with dot like 3.14 or 7.0

- python treat 7.0 as float even if it look whole

string (str)

- text basically

- like "hello world"

- u cant do `"text" + 5` it breaks the code
  need to turn 5 into string first: `str(5)`

bool

- only True or False

- used in if statements alot

i still mess these up sometimes but im getting better lol

variables (kinda like boxes)

variable is a name where u throw in some value
 python dont need you to say what type it is before

example:

```python
name = "kevin"
age = 16
price = 9.99
is_tired = True
```

later you can print them or use them in math
 but be careful cuz python is sensitive to spaces and stuff

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conditions (if stuff)

if lets python choose what to do
 very important u indent (tab) inside the if or python gets mad

```python
if age >= 18:
    print("adult")
```

if else

```python
if age >= 18:
    print("adult")
else:
    print("not adult")
```

elif (else if but shorter)

```python
grade = 73

if grade >= 90:
    print("A")
elif grade >= 80:
    print("B")
```

```
elif grade >= 70:
    print("C")
else:
    print("below that")
```

my teacher say try not to make too many elif or it looks ugly but idk

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nested if (if inside another if)

kinda confusing first time but makes sense

```
age = 20
hasID = False

if age >= 18:
    if hasID:
        print("ok you enter")
    else:
        print("no id no entry")
else:
    print("too young sorry")
```

im trying to keep it clean but nested if can look like a staircase haha

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random extra notess

- python dont like mixing types like string + int

- print() always has () dont forget

- spacing matters too much

- i keep forgetting colon : after if

- booleans start with capital letter True False (weird but ok)

Updating soon

:)