DS2001 - Computer Science Practicum #1
Fall 2021
September 8 - 9, 2021
Deadline: September 10, 2021 at 12:00pm Boston time via Gradescope
What you're turning in: p1.py

What we're practicing today:
- Getting to know each other
- Getting to know the teaching team
- Computers/computing mini foundations
- Establishing our bearings for this course in regards to logistics, turning assignments in, etc

Handouts:
- DS 2000 variables & I/O (input/output)

What to do if you miss practicum this week:
- Fill out the "I'm missing class" form ASAP
- Follow up in office hours with Felix (find office hours links on the course website)
- Make sure to come to practicum next week if you are well again. **Do not come to class if you are not feeling well.**

Your first practicum will **not** be included in your final score.

To complete this portion of practicum, do the following:

- install Anaconda Navigator
- Create a new .py file using Spyder called "p1.py"
  - Important! the file name must exactly match what we've asked for here or Gradescope will get angry.
- Pick out your favorite animal (or an animal that you like if you can't decide), then write the python code for a program that uses the `print` function to print out the following (don't worry, we won't check whether or not you *actually* have the animal that you pick):

My name is FILL ME IN. I am taking ds 2001 because FILL ME IN.
I have a YOUR ANIMAL HERE.
My ANIMAL's name is FILL ME IN.
My ANIMAL is FILL ME IN feet tall.
In binary that number is FILL ME IN!

Change everything that is in CAPITAL LETTERS to values that you choose! When getting the binary number for your animal's height, feel free to use a decimal to binary converter like this one.

When you've finished: turn in **p1.py** to the **Practicum 1 - Intro** submission item on gradescope. Note! Please make sure that your file name is **exactly** p1.py!

Hint 1: if you want to print multiple values on one line, call the **print()** function like **print(value1, value2).** For example:

```
print("I am ", 100)
```

prints

```
I am 100
```

Hint 2: you can get python to do the binary conversion for you if you use the **bin()** function directly in your call to **print()**. This is because **bin()** will *return* the binary value of the integer that you gave it, then will hand this off to the **print()** function!

```
print("Number in binary: ", bin(100))
```

prints

```
Number in binary: 0b1100100
```

Notice that the number printed here is preceded by "0b" — this is because this is a binary value, not an integer, so the underlying data type that python is working with needs to tell python to treat it as binary!

Before you turn in your program, go ahead and add a **file comment** at the beginning of your file. This includes information like your name, the assignment that you are working on, and the purpose of your program. Including a file comment is a good habit to get into!

Here's an example:

```
# Felix Muzny
# DS 2001 - CS
# Sept 8, 2021 (Sept 9 for Thursday folks)
# Practicum 1 - Intro
```

If you finish early...

- modify your program so that your animal's height is stored as an integer in a *variable*. Then, use the **bin()** function to convert that number to binary before printing it out!
- Read the ["The Way Things Work Now: Making Bits"](#) handout from the course website.