

day5 loop fun

Due: 6th: Thursday 8/18/22

7th: Friday 8/19/22

Today we're going to start with another infinite loop. That's a loop that will go forever. It's pretty easy to do:

```
while True:
    print("Hello")
```

The above program prints Hello over and over forever. Thankfully in repl you can click the Stop button to make it end. Today we're going to make a loop that prints some things and then asks the user if they want to run again. If they don't want to run again, the program exits the forever loop using a "break" command. Here is an updated program:

```
while True:
    print("Hello")
    r = input("Run again? (y/n)")
    if r == "n":
        break
print("Goodbye")
```

When you run this program it looks like this:

```
Hello
Run again? (y/n)y
Hello
Run again? (y/n)n
Goodbye
```

Here are a couple of things to notice:

- Look at the `if r == "n":` line. Remember, when you are checking if one thing is equal to another thing you have to use two equals signs.
- When we are checking if the user entry (stored in the variable `r`) is equal to "n" we have to use quotes around the n, otherwise Python will be wondering what variable n you are talking about.
- To print something after the forever loop is over you have to make sure it is unindented back to the main left level (same as the `while True:` line).

You first task today:

- Make a day5 loop fun program in repl. Put your name in a comment at the top. Name the program "day5 loop fun".
- Make a `while True:` loop.
- Inside that loop, make another loop, this time like we have always done, making a loop variable `x` and looping as long as `x` is less than 10.
- Inside the inside loop, print `x` dollar signs each time through. You do that with a line like this:

```
print(x*" $")
```

- After that line, put the `x = x + 1` line
- Outside of the `x` loop, add a line like I did in my sample program where you ask the user if they want to run again.
- If the user enters "n", break.
- Print a goodbye message outside of all of the loops.

See sample output, tips, and a [helpful video](#) on next page.

Here is sample output from this first program for today:

```
$
$$
$$$
$$$$
$$$$$
$$$$$$
$$$$$$$
$$$$$$$$
$$$$$$$$$
$$$$$$$$$
Run again? (y/n) y
$
$$
$$$
$$$$
$$$$$
$$$$$$
$$$$$$$
$$$$$$$$
$$$$$$$$$
$$$$$$$$$
Run again? (y/n) y
$
$$
$$$
$$$$
$$$$$
$$$$$$
$$$$$$$
$$$$$$$$
$$$$$$$$$
$$$$$$$$$
Run again? (y/n) n
Thanks, see you later.
```

If you are stumped on how to do this, [watch my video here. I do the entire project from start to finish.](#)

Please test your program. Try entering y to run again, make sure it runs again, and then try entering n to quit. Make sure you get the goodbye message only once at the very end. If you get stuck, watch my video. It's short and sweet.

Remember, there are two assignments for today:

day5 more ifs
day5 loop fun