1. Write a program that prints your name 100 times using loop.

```
In [4]: ethan = 0

while ethan < 100:
    print("ethan")
    ethan = ethan + 1</pre>
```

ethan

ethan ethan

ethan

ethan ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan

ethan ethan

ethan

ethan ethan

ethan

1. Similar to problem 1 – write a program that asks the user for their name, asks the user for a number, and then prints their name that many times. a. Ex. If I type in "Daniel", and then type in 40, then the program should print "Daniel" 40 times.

```
In [16]: name = input("What is your name? ")
num = int(input("How many times do you want to see yout name? "))
while num > 0:
    print(name)
    num = num - 1
```

```
What is your name? ethan

How many times do you want to see yout name? 10

ethan

ethan
```

What's your favorite color? white

1. Write a program that asks the user for their favorite color. If it's equal to your favorite color, then end the program – otherwise, keep asking them until they answer correctly.

```
In [35]: while True:
    color = str(input("What's your favorite color? "))
    if color == "white" :
        break

What's your favorite color? nah
```

1. Consider the calculator problem from the lab 4, Question 4 and modify it. Make the calculator run indefinitely, unless the user types in "stop" as the operation, in which case, exit the program. a. hint: You may want to use a break statement to immediately stop the loop.

```
In [51]:
         while True:
              try:
                  A = float(input("Enter value for A "))
                  B = float(input("Enter value for B "))
              except:
                  print("input a numeric value")
              opp = str(input("Enter your opperation as a string "))
              if(opp == "add"):
                  print(A + B)
                  continue
              if(opp == "sub"):
                  print(A - B)
                  continue
              if(opp == "mul"):
                  print(A * B)
                  continue
              if(opp == "div"):
                  print(A / B)
                  continue
              if(opp == "mod"):
                  print(A % B)
                  continue
              if(opp == "intdiv"):
                  print(A // B)
                  continue
              if(opp == "pow"):
                  print(A ** B)
```

```
continue
if(opp == "stop"):
    print("Calculations Stopping")
    break
```

```
Enter value for A 5
Enter value for B 5
Enter your opperation as a string add 10.0
Enter value for A 5
Enter value for B 5
Enter your opperation as a string stop Calculations Stopping
```

1. Write a program that multiplies two numbers (x and y) using only repeated addition. a. You don't need to let the user type in the numbers. b. Make sure the code works for any integer value of x and y.

```
In [44]: x = float(input("Enter your value for X: "))
          print("X = ", x)
          y = float(input("Enter your value for Y: "))
          print("Y = ", y)
          count = 1
          sum = 0
          while count <= y:</pre>
              sum = sum + x
              count = count + 1
          print("Sum =", sum)
         Enter your value for X: 5
         X = 5.0
         Enter your value for Y: 5
         Y = 5.0
         Sum = 25.0
 In [ ]:
```