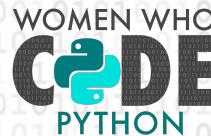


Less Is More: How to Code Python in One Line

Our Mission

Inspiring women to
excel in technology
careers.



Our Vision

A world where diverse women are better represented as engineers and tech leaders



Our Values

- + Focus on the mission
- + Live Leadership
- + Punch above your weight
- + Inclusion at the core



Our Target

Engineers with two or more years of experience looking for support and resources to strengthen their influence and levelup in their careers.



290,000

Members

70 networks in 20 countries

122+ countries

14K+ events

\$1025 daily Conference tickets

\$2M Scholarships

Access to [jobs](#) + [resources](#)

Infinite connections



OUR MOVEMENT

As the world changes, we can be a connecting force that creates a sense of belonging while the world is being asked to isolate.



Code of Conduct

WWCode is an inclusive community, dedicated to providing an empowering experience for everyone who participates in or supports our community, regardless of gender, gender identity and expression, sexual orientation, ability, physical appearance, body size, race, ethnicity, age, religion, socioeconomic status, caste, creed, political affiliation, or preferred programming language(s).

Our events are intended to inspire women to excel in technology careers, and anyone who is there for this purpose is welcome. We do not tolerate harassment of members in any form. Our [Code of Conduct](#) applies to all WWCode events and online communities.

Read the full version and access our incident report form at

womenwhocode.com/codeofconduct

Upcoming Python Events

FRI
22
OCT

★ LeetCode Series Study Group ★ *Featured, Recurring*
● Online | Python | 5:30 AM – 7:00 AM IST (UTC+0530)

Register

SAT
23
OCT

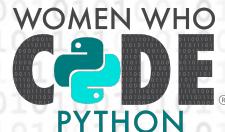
Bytes n' Brew I
● Online | Python | 12:30 PM – 1:30 PM IST (UTC+0530)

Register

FRI
29
OCT

Introduction to Python for Automating Business & Financial Processes with
Liberty Mutual *Featured*
● Online | Python | 2:30 AM – 3:30 AM IST (UTC+0530)

Register



Register at: <https://www.womenwhocode.com/python/events>

Follow us

Register for Events and Join our community -

womenwhocode.com/python

Email - python@womenwhocode.com

Social Media: 



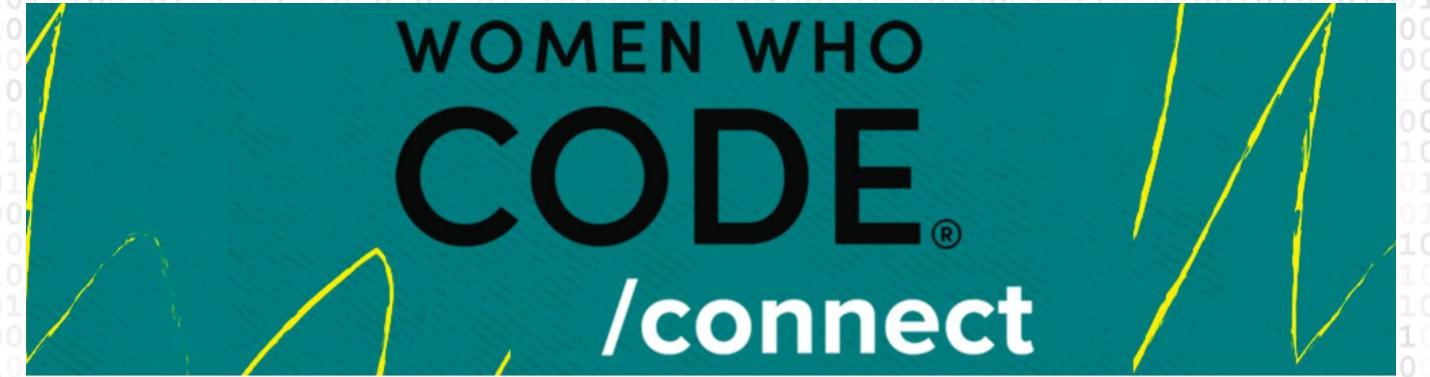
@WWCodePython



Women Who Code Python



@WWCodePython



CONNECT Forward 2021

November 18 & November 19, 2021

REGISTER

Join the largest and most active community of technical women for two days of career advancement, connection, and more!

Register
here:



Get 50% off your Member ticket!
Promo Code: **WWCODEPYTHON**

Less Is More: How to Code Python in One Line: Beginner Session



Poojita Garg



Karen Wong



Meet your instructor:

Poojita Garg

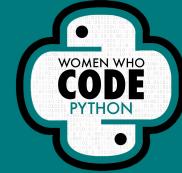
Research Associate at Georgia Tech
(USA) and IIT Ropar (India)

Volunteer at Women Who Code Python

Twitter: @PoojitaGarg

Today's Agenda

1. Intro to one line coding
2. Benefits of one line coding
3. Live coding session
4. Q/A



In the coding world...

- Clarity of coding logic and readability is the priority (although it doesn't happen often)
- The more lines of code in a script the harder it is to understand and to debug (the more you have to take care of)

*Imagine yourself reading
your coding project in 10
months...*



One-Line Coding

- One or minimal line of code(s) to perform tedious tasks / functions
- Unlike other programming languages, one-line coding in Python can be easily done!

```
1 #Leap year calculator
2 #This example shows how important the way that if-else statements are written is.
3 #If we use and/or operators correctly, our code will be a lot easier to understand.
4
5 #Bad Code:
6 year=int(input("Year: "))
7 if year%4==0:
8     if year%100==0:
9         if year%400==0:
10             if year%4000==0:
11                 print("Not a leap year")
12             else:
13                 print("It's a leap year")
14         else:
15             print("Not a leap year")
16     else:
17         print("It's a leap year")
18 else:
19     print("Not a leap year")
20
21 #Good Code:
22 year=int(input("Year: "))
23 if year%4==0 and (year%100!=0 or (year%400==0 and year%4000!=0)):
24     print("It's a leap year")
25 else:
26     print("Not a leap year")
27
28 #Best Code: (This is a bonus example, it reminds the students to always check for inputs first)
29 year=input("Year: ")
30 try:
31     year=int(year)
32     if year%4==0 and (year%100!=0 or (year%400==0 and year%4000!=0)):
33         print("It's a leap year")
34     else:
35         print("Not a leap year")
36 except:
37     print("Not a number!")
```

Benefits of One-Line Coding

easier to:

- read!
- maintain and debug

Also reduce:

- Local memory
- Complexity
- Execution time
- Confusion especially when the script is co-developed with others

For example...

Tasks:

- Read the text file
- Convert all alphabets to lower cases
- Change “b” to “p” in the text file

Though the mental strain of mastering this balancing act has been apparent for decades, Covid-19 has cast a particularly harsh light on the problem. Statistics show that stress and burnout are affecting more women than men, and particularly more working mothers than working fathers. This could have multiple impacts for the post-pandemic world of work, making it important that both companies and wider society find ways to reduce this imbalance.



[though the mental strain of mastering this palancing act has been apparent for decades, covid-19 has cast a particularly harsh light on the proplem', 'statistics show that stress and purnout are affecting more women than men, and particularly more working mothers than working fathers', 'this could have multiple impacts for the post-pandemic world of work, making it important that poth companies and wider society find ways to reduce this impalance', '\n']

Multi-line codes in Python

Tasks:

- Read the text file
- Convert all alphabets to lower cases
- Change “b” to “p” in the text file

```
1 with open ('news.txt' , 'r') as f:  
2     paragraph = f.readlines()  
3     f.close()  
4  
5 cleaned_paragraph = []  
6 for each_line in paragraph:  
7     new_line = each_line.lower()  
8     new_line = new_line.replace('b', 'p')  
9     cleaned_paragraph.append(new_line)
```

One-line code in Python

Tasks:

- Read the text file
- Convert all alphabets to lower cases
- Change “b” to “p” in the text file

```
1 f = open('news.txt', 'r').read()
2 cleaned_paragraph = [each_line.lower().replace('b','p') for each_line in f.split('. ')]
```

Let's Code!

[click here!](#)

QnA Time!

Coming up in the series !

- Intermediate session 1 on 9 Nov @ 12 AM EST
- Intermediate session 2 on 16 Nov @ 12 AM EST
- Advance session on 30 Nov @ 12 AM EST

Thank you!