

## Python Intermediate Challenge-1

54% of the respondents from the O'Reilly Data Science Salary Survey indicated that they used Python as a data science tool. Nobody can deny that Python has been on the rise in the data science industry and it certainly seems that it's here to stay. This rise in popularity in the industry, the long gone infancy of Python packages for data analysis, the low and gradual learning curve and the fact that it is a fully fledged programming language are only a couple of reasons that make Python an exceptional tool for data science. Although Python is a very readable language, you might still be able to use some help.

You will be facing some challenging questions on python in this assignment. Below following steps would help you to complete this assignment:

1. Read the question
2. Go to the link given under the question
3. You will land on Hakerrank page, if not then create your Hakerrank account.
4. Once you land on hankerank page mentioned under question, go through the given problem carefully.
5. Solve it in the editor given in the page. Select python3 as your language in the editor and click 'Run Code' Button
6. Once you have passed all the sample test cases, write your solution in this assignment against each question.

If you need any assistance on python, then please refer below cheatsheets:

Cheatsheet reference: <http://datacamp-community-prod.s3.amazonaws.com/0eff0330-e87d-4c34-88d5-73e80cb955f2> (<http://datacamp-community-prod.s3.amazonaws.com/0eff0330-e87d-4c34-88d5-73e80cb955f2>)

### Q1 Python If-Else

link - <https://www.hackerrank.com/challenges/py-if-else/problem> (<https://www.hackerrank.com/challenges/py-if-else/problem>)

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### Q2 Arithmetic Operators

link - <https://www.hackerrank.com/challenges/python-arithmetic-operators/problem> (<https://www.hackerrank.com/challenges/python-arithmetic-operators/problem>)

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### Q3 Print Function

link - <https://www.hackerrank.com/challenges/python-print/problem>  
(<https://www.hackerrank.com/challenges/python-print/problem>)

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### Q4 Write a function

link - <https://www.hackerrank.com/challenges/write-a-function/problem>  
(<https://www.hackerrank.com/challenges/write-a-function/problem>)

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### Q5 List Comprehensions

link - <https://www.hackerrank.com/challenges/list-comprehensions/problem>  
(<https://www.hackerrank.com/challenges/list-comprehensions/problem>)

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### Q6 Find the Runner-Up Score!

link - <https://www.hackerrank.com/challenges/find-second-maximum-number-in-a-list/problem>  
(<https://www.hackerrank.com/challenges/find-second-maximum-number-in-a-list/problem>)

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### Q7 Nested Lists

link - <https://www.hackerrank.com/challenges/nested-list/problem>  
(<https://www.hackerrank.com/challenges/nested-list/problem>)

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### Q8 Finding the percentage

link - <https://www.hackerrank.com/challenges/finding-the-percentage/problem>  
(<https://www.hackerrank.com/challenges/finding-the-percentage/problem>).

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### Q9 Lists

link - <https://www.hackerrank.com/challenges/python-lists/problem>  
(<https://www.hackerrank.com/challenges/python-lists/problem>).

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### Q10 Tuples

link - <https://www.hackerrank.com/challenges/python-tuples/problem>  
(<https://www.hackerrank.com/challenges/python-tuples/problem>)

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### Q11 The Minion Game

link - <https://www.hackerrank.com/challenges/the-minion-game/problem>  
(<https://www.hackerrank.com/challenges/the-minion-game/problem>)

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## Q12 Designer door mat

link - <https://www.hackerrank.com/challenges/designer-door-mat/problem>  
(<https://www.hackerrank.com/challenges/designer-door-mat/problem>)

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## Q13 Merge the tools

link - <https://www.hackerrank.com/challenges/merge-the-tools/problem>  
(<https://www.hackerrank.com/challenges/merge-the-tools/problem>)

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## Q14 find a string

link - <https://www.hackerrank.com/challenges/find-a-string/problem>  
(<https://www.hackerrank.com/challenges/find-a-string/problem>)

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**Q15 no idea**

link - <https://www.hackerrank.com/challenges/no-idea/problem> (<https://www.hackerrank.com/challenges/no-idea/problem>).

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**Q16 Symmetric difference set**

link - <https://www.hackerrank.com/challenges/py-set-symmetric-difference-operation/problem> (<https://www.hackerrank.com/challenges/py-set-symmetric-difference-operation/problem>).

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**Q17 lambda map expression**

link - <https://www.hackerrank.com/challenges/map-and-lambda-expression/problem> (<https://www.hackerrank.com/challenges/map-and-lambda-expression/problem>).

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**Q18. validate list of email address**

link - <https://www.hackerrank.com/challenges/validate-list-of-email-address-with-filter/problem>  
(<https://www.hackerrank.com/challenges/validate-list-of-email-address-with-filter/problem>).

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### Q19 reduce function problem

link - <https://www.hackerrank.com/challenges/reduce-function/problem>  
(<https://www.hackerrank.com/challenges/reduce-function/problem>).

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### Q20 collection counter problem

link - <https://www.hackerrank.com/challenges/collections-counter/problem>  
(<https://www.hackerrank.com/challenges/collections-counter/problem>).

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### Q21 collections namedtuple



link - <https://www.hackerrank.com/challenges/py-collections-namedtuple/problem>  
(<https://www.hackerrank.com/challenges/py-collections-namedtuple/problem>)

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## Q22 default dict

link - <https://www.hackerrank.com/challenges/defaultdict-tutorial/problem>  
(<https://www.hackerrank.com/challenges/defaultdict-tutorial/problem>)

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## Q23 Ordered dict

link - <https://www.hackerrank.com/challenges/py-collections-ordereddict/problem>  
(<https://www.hackerrank.com/challenges/py-collections-ordereddict/problem>)

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## Q24 word order

link - <https://www.hackerrank.com/challenges/word-order/problem>  
(<https://www.hackerrank.com/challenges/word-order/problem>)

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### Q25 Company logo

link - <https://www.hackerrank.com/challenges/most-commons/problem>  
(<https://www.hackerrank.com/challenges/most-commons/problem>)

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### Q26 itertools product

link - <https://www.hackerrank.com/challenges/itertools-product/problem>  
(<https://www.hackerrank.com/challenges/itertools-product/problem>)

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### Q27 itertools permutation

link - <https://www.hackerrank.com/challenges/itertools-permutations/problem>  
(<https://www.hackerrank.com/challenges/itertools-permutations/problem>)

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### Q28 itertools combination

link - <https://www.hackerrank.com/challenges/itertools-combinations/problem>  
(<https://www.hackerrank.com/challenges/itertools-combinations/problem>)

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### Q29 itertools combination

link - <https://www.hackerrank.com/challenges/itertools-combinations-with-replacement/problem>  
(<https://www.hackerrank.com/challenges/itertools-combinations-with-replacement/problem>)

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### Q30 compress the string

link - <https://www.hackerrank.com/challenges/compress-the-string/problem>  
(<https://www.hackerrank.com/challenges/compress-the-string/problem>)

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### Q31 iterables and iterators

link - <https://www.hackerrank.com/challenges/iterables-and-iterators/problem>  
(<https://www.hackerrank.com/challenges/iterables-and-iterators/problem>).

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### Q32 Maximize it

link - <https://www.hackerrank.com/challenges/maximize-it/problem>  
(<https://www.hackerrank.com/challenges/maximize-it/problem>).

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**"Cheers":) Congratulations! you have completed the Python Intermediate challenge.**

## FeedBack

We hope you've enjoyed this course so far. We're committed to help you use "AI for All" course to its full potential, so that you have a great learning experience. And that's why we need your help in form of a feedback here.

Please fill this feedback form <https://zfrmz.in/MtRG5oWXBdesm6rmSM7N>  
(<https://zfrmz.in/MtRG5oWXBdesm6rmSM7N>).