# Challenges Completed

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# Problem 1

# Introduction (7/7):

- 1. Say "Hello, World!" With Python
- 2. Python If-Else
- 3. Arithmetic Operators
- 4. Python: Division
- 5. Loops
- 6. Write a function
- 7. Print Function

#### Data types (6/6):

- 1. List Comprehensions
- 2. Find the Runner-Up Score!
- 3. Nested Lists
- 4. Finding the percentage
- 5. Lists
- 6. Tuples

#### Strings (13.5/14):

- 1. sWAP cASE
- 2. String Split and Join
- 3. What's Your Name?
- 4. Mutations
- 5. Find a string
- 6. String Validators
- 7. Text Alignment
- 8. Text Wrap
- 9. Designer Door Mat
- 10. String Formatting
- 11. Alphabet Rangoli
- 12. Capitalize!
- 13. The Minion Game (seems correct but it isn't inefficient enough)
- 14. Merge the Tools!

#### Sets (13/13):

- 1. Introduction to Sets
- 2. No Idea!
- 3. Symmetric Difference
- 4. Set .add()
- 5. Set .discard(), .remove() & .pop()
- 6. Set .union() Operation
- 7. Set .intersection() Operation

- 8. Set .difference() Operation
- 9. Set .symmetric\_difference() Operation
- 10. Set Mutations
- 11. The Captain's Room
- 12. Check Subset
- 13. Check Strict Superset

#### Collections (8/8):

- 1. collections.Counter()
- 2. DefaultDict Tutorial
- 3. Collections.namedtuple()
- 4. Collections.OrderedDict()
- 5. Word Order
- 6. Collections.deque()
- 7. Company Logo
- 8. Piling Up!

#### Date and Time (2/2):

- 1. Calendar Module
- 2. Time Delta

#### Exceptions (1/1):

1. Exceptions

#### Built-ins (3/3):

- 1. Zipped!
- 2. Athlete Sort
- 3. ginortS

### Python Functionals (1/1):

1. Map and Lambda Function

#### Regex and Parsing challenges (5/17):

- 1. Detect Floating Point Number
- 2. Re.split()
- 3. Group(), Groups() & Groupdict()
- 4. Re.findall() & Re.finditer()
- 5. Re.start() & Re.end()

# XML (2/2):

- 1. XML 1 Find the Score
- 2. XML2 Find the Maximum Depth

### Closures and Decorations (2/2)

- 1. Standardize Mobile Number Using Decorators
- 2. Decorators 2 Name Directory

# Numpy (9/15):

- 1. Arrays
- 2. Shape and Reshape
- 3. Transpose and Flatten
- 4. Concatenate
- 5. Zeros and Ones
- 6. Eye and Identity
- 7. Array Mathematics
- 8. Floor, Ceil and Rint
- 9. Sum and Prod

# Problem 2 (6/6):

- 1. Birthday Cake Candles
- 2. Number Line Jumps
- 3. Viral Advertising
- 4. Recursive Digit Sum
- 5. Insertion Sort Part 1
- 6. Insertion Sort Part 2