**Recommended Courses for Re-Skilling**

Provided below are portions of the courses that are relevant for gaining the knowledge and skills necessary to solve the HackerRank assessments and also real-world use cases

**Python Track**

**Day 01:**

Objectives:

* Familiarity with the language syntax and basic constructs used to represent and work with data / values
* Decision making based on data and execute logic based on the decisions

- Course: Programming for Everybody (Getting Started with Python)

* <https://www.coursera.org/learn/python>

- Chapters from the course:

Chapter Two: Variables and Expressions

Chapter Three: Conditional Code

**Day 02:**

Objectives:

* Code organization, modularization that will help with naming and re-use
* Basic programming patterns to repeat logic based on criteria

- Course: Programming for Everybody (Getting Started with Python)

* <https://www.coursera.org/learn/python>

- Chapters from the course:

Chapter Four: Functions

Chapter Five: Loops and Iteration

**Day 03:**

Objectives:

* Working with Text - characters and strings
* Manage multiple values - List data structure

- Course: Python Data Structures

* <https://www.coursera.org/learn/python-data?specialization=python>

- Chapters:

Chapter Six: Strings

Chapter Eight: Lists

**Day 04:**

Objectives:

* Common Data Structures
* Dictionaries (aka HashTables)
* Store data as Key/Value pairs
* Tuples. Collection of arbitary values

- Course: Python Data Structures

* <https://www.coursera.org/learn/python-data?specialization=python>

- Chapters:

Chapter Nine: Dictionaries

Chapter Ten: Tuples

**Day 05:**

Challenges from HackerRank:

- [Python If-Else](<https://www.hackerrank.com/challenges/py-if-else/problem>)

- [Loops](<https://www.hackerrank.com/challenges/python-loops/problem>)

- [Find the Runner-Up Score!](<https://www.hackerrank.com/challenges/find-second-maximum-number-in-a-list/problem>)

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

- [What's Your Name?](<https://www.hackerrank.com/challenges/whats-your-name/problem>)

- [String Formatting](<https://www.hackerrank.com/challenges/python-string-formatting/problem>)

- [String Split and Join](<https://www.hackerrank.com/challenges/python-string-split-and-join/problem>) – difficult time getting it perfect

- [Plus Minus](<https://www.hackerrank.com/challenges/plus-minus/problem>)

STD Out Error – OK in Visual Studio

- [Compare the Triplets](<https://www.hackerrank.com/challenges/compare-the-triplets/problem>)

- [Time Conversion](<https://www.hackerrank.com/challenges/time-conversion/problem>)

- [Migratory Birds](<https://www.hackerrank.com/challenges/migratory-birds/problem>)

- [Day of the Programmer](<https://www.hackerrank.com/challenges/day-of-the-programmer/problem>)

**JavaScript Track**

**Day 01:**

Objectives:

* Familiarity with the language syntax and basic constructs
* Decision making based on data and execute logic based on the decisions

- Course: JavaScript JumpStart Online

* <https://learn.fullstackacademy.com/workshop/566f3decc30171030006c420/landing>

- Chapter Three: Values, Types, and Variables

**Day 02:**

Objectives:

* Code organization, modularization that will help with naming and re-use
* Basic programming patterns to repeat logic based on criteria

- Course: JavaScript JumpStart Online

* <https://learn.fullstackacademy.com/workshop/566f3decc30171030006c420/landing>

- Chapter Four: Functions

- Chapter Five: Conditionals

**Day 03:**

Objectives:

* Working with Text and numerics
* Basic programming patterns to repeat logic based on criteria

- Course: JavaScript JumpStart Online

* <https://learn.fullstackacademy.com/workshop/566f3decc30171030006c420/landing>

- Chapter Six: Strings & Numbers

- Chapter Eight: Loops

**Day 04:**

Objectives:

* Manage multiple values - List data structure

- Course: JavaScript JumpStart Online

* <https://learn.fullstackacademy.com/workshop/566f3decc30171030006c420/landing>

- Chapter Ten: Arrays

- Chapter Twelve: Wrapping up

**Day 05:**

Challenges from HackerRank:

- All challenges in [10 Days of Javascript](<https://www.hackerrank.com/> domains/tutorials/10-days-of-javascript) till Day 7

- [Plus Minus](<https://www.hackerrank.com/challenges/plus-minus/problem>)

- [Compare the Triplets](<https://www.hackerrank.com/challenges/compare-the-triplets/problem>)

- [Time Conversion](<https://www.hackerrank.com/challenges/time-conversion/problem>)

- [Migratory Birds](<https://www.hackerrank.com/challenges/migratory-birds/problem>)

- [Day of the Programmer](https://www.hackerrank.com/challenges/day-of-the-programmer/problem)

**Java Track**

**Day 01:**

Objectives:

* Familiarity with the language syntax and basic constructs
* Decision making based on data and execute logic based on the decisions
* Static Typing, Classes and Methods

- Course: Java Programming: Solving Problems with Software

<https://www.coursera.org/learn/java-programming#syllabus>

- Chapter: Fundamental Java Syntax and Semantics

**Day 02:**

Objectives:

* Working with Text - characters and strings
* Basic programming patterns to repeat logic based on criteria

- Course: Java Programming: Solving Problems with Software

- <https://www.coursera.org/learn/java-programming#syllabus>

- Chapter: Strings in Java

**Day 03:**

Objectives:

* Common Data Structures
* Arraylists & HashMaps. Store data as Sequences and Key/Value pairs

- Course: Java Programming: Arrays, Lists, and Structured Data

* <https://www.coursera.org/learn/java-programming-arrays-lists-data>

-Chapter: GladLibs: Stories from Templates

**Day 04:**

Objectives:

* Common Data Structures. LinkedLists & Arrays
* Loops. Basic programming patterns to repeat logic based on criteria
* Regular Expressions

- Course: Data Structures and Performance

* <https://www.coursera.org/learn/data-structures-optimizing-performance>

- Chapters: Working with Strings & Interfaces, Linked Lists vs. Arrays, and Correctness

**Day 05:**

Challenges from HackerRank:

- [Plus Minus](<https://www.hackerrank.com/challenges/plus-minus/problem>)

- [Compare the Triplets](<https://www.hackerrank.com/challenges/compare-the-triplets/problem>)

- [Time Conversion](<https://www.hackerrank.com/challenges/time-conversion/problem>)

- [Migratory Birds](<https://www.hackerrank.com/challenges/migratory-birds/problem>)

- [Day of the Programmer](<https://www.hackerrank.com/challenges/day-of-the-programmer/problem>)