

Course: Introduction to Programming Using Python

Module 5. Sorting and Searching. **Part 2**

Task 1

Write a program that sorts a list of integers using Shell's method.

Task 2

Write a program that sorts a list of integers using the heap sort.

Task 3

Write a program that sorts a list of integers using the quick sort.

Task 4

You have a stack of pancakes different in radius. The only operation performed on them is this: put a spatula between two pancakes and swap the pancakes above the spatula. Sort the pancakes from the largest to the smallest bottom-up using as little operations as you can.