Parsons Problems – Python

Bubble Sort – Part 1 of 3: Populating an array

This program should create an empty array of 5 items and then step through each item, adding a random number in each slot.

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| --- |
| for i in range(size): |
| import random |
| list = [0] \* 5 |
| list[i] = random.randint(1,100) |
| print(list) |
| size = len(list) |

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Parsons Problems – Python

Bubble Sort – Part 2 of 3: Swapping two numbers

This program should swap the value in position i with the value next to it if they are the wrong way round.

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| --- |
| if list[i] > list[i+1]: |
| list[i+1] = temp  |
| list[i] = list[i+1] |
| temp = list[i] |

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Parsons Problems – Python

Bubble Sort – Part 3 of 3: Complete Bubble Sort

This program should perform a bubble sort, making use of the code from Part 2. It should print the current state of the list out after **each pass**.

|  |
| --- |
| for i in range(size-1): |
| for j in range(size-1): |
| if list[i] > list[i+1]: |
| list[i+1] = temp  |
| list[i] = list[i+1] |
| print(list) |
| temp = list[i] |

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