1. Write a python program that calculates and displays the total number of elements, average, minimum and maximum values of a tuple.. **You are not allowed to use any builtin function such as sum, len(), min() or max()**

[CO4, CO6]

[10 marks]

**Given Input 1:**

(1, 2, 3, 4)

**Sample Output 1:**

Total elements: 4

Average : 2.5

Minimum: 1

Maximum: 4

**Given Input 2:**

(1, 4, 3, 2)

**Sample Output 2:**

Total elements: 4

Average : 2.5

Minimum: 1

Maximum: 4

2. Trace the following code:

| **1** | **dict1 = {'a':9 , 'b':-2 , 'c':5 , 'd':-1 }** |
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| **2** | **for i in dict1:** |
| **3** | **j = 0** |
| **4** | **k = 22** |
| **5** | **while j < 2:** |
| **6** | **if j % 2 == 0:** |
| **7** | **k = dict1['a'] - 2** |
| **8** | **dict1[i] = dict1[i]+ int(k)** |
| **9** | **else:** |
| **10** | **k = dict1['d'] + 2** |
| **11** | **dict1[i] = dict1[i] - int(k)** |
| **12** | **j += 1** |
| **13** | **print(int(k))** |
| **14** | **print(i + " -> " + str(dict1[i]))** |

| **Output** |
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