Assignment 2

Semester 5

Group 27

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Procedure followed:

1. Create three arrays of size 10 which will be used to map values in a cycle
2. For each input cycle, store the mapped value of an integer in the corresponding array.
   For example, a cycle of (123) will have map of 1 to 2, 2 to 3 and 3 to 1.
3. To do this , initialize each array with a default value of 10. When mapping, check if the mapped value in the array has a default value. If not, it means the cycle is wrong.
4. When the two cycles are taken, map the mapped value of cycle 1 to cycle 2. This value will be stored in array 3.
   For example, (123) and (234) are two cycles. Map of 1 in array 1 is 2 which maps to 3 in array 2. So 1 maps to 3 in array 3.
5. With this array 3 made, iterate from 0 to 9 and traverse elements for corresponding mapping. If traversed to same element, no need to save in a cycle.
   For example, if array 3 looks like [0234156789], map of 0 is 0 so no need to save in cycle. 1->2->3->4->1. So save this cycle (1234)
6. The saved cycle is then shown in output.