

### Introduction:

You have studied about algorithms and loops .

An algorithm is a list of steps one can follow to complete a task.

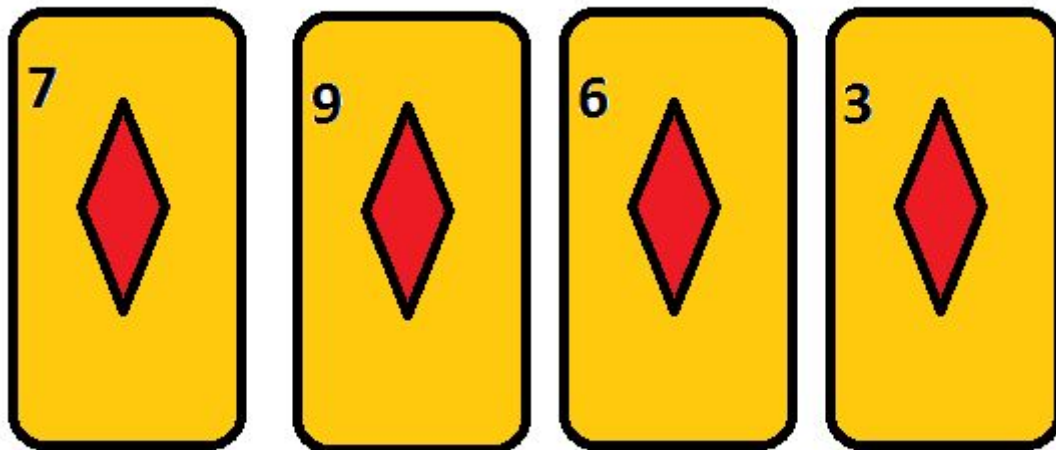
And a loop is a sequence of steps repeated until a condition is reached .

### Sorting

We have looked that sorting is ordering of things in increasing or decreasing fashion based on a characteristic. We learned a simple algorithm of sorting, where a largest/smallest number is selected from the group and kept in a new group. This operation is repeated until no number is left in old group.

### Questions: (\* questions can be used for evaluation)

Can you sort the following deck of cards in increasing order?





## Introduction To Sorting

### Work Sheet: 04-ALG-02-WS



1. Can you now sort the following numbers in decreasing order and write it step by step.

a. 40, 50, 60, 100, 20, 200

Largest number :	New list:	Old List :
Largest number :	New list:	Old List :
Largest number :	New list:	Old List :
Largest number :	New list:	Old List :
Largest number :	New list:	Old List :
Largest number :	New list:	Old List :

Number of iterations :      Result :

b. 31, 68, 42, 1, 23, 78

c. 10, 50, 100, 200, 300, 400

2. In the above examples, a, b & c, which problem took the most number of iterations? Write why you think so in a few words.