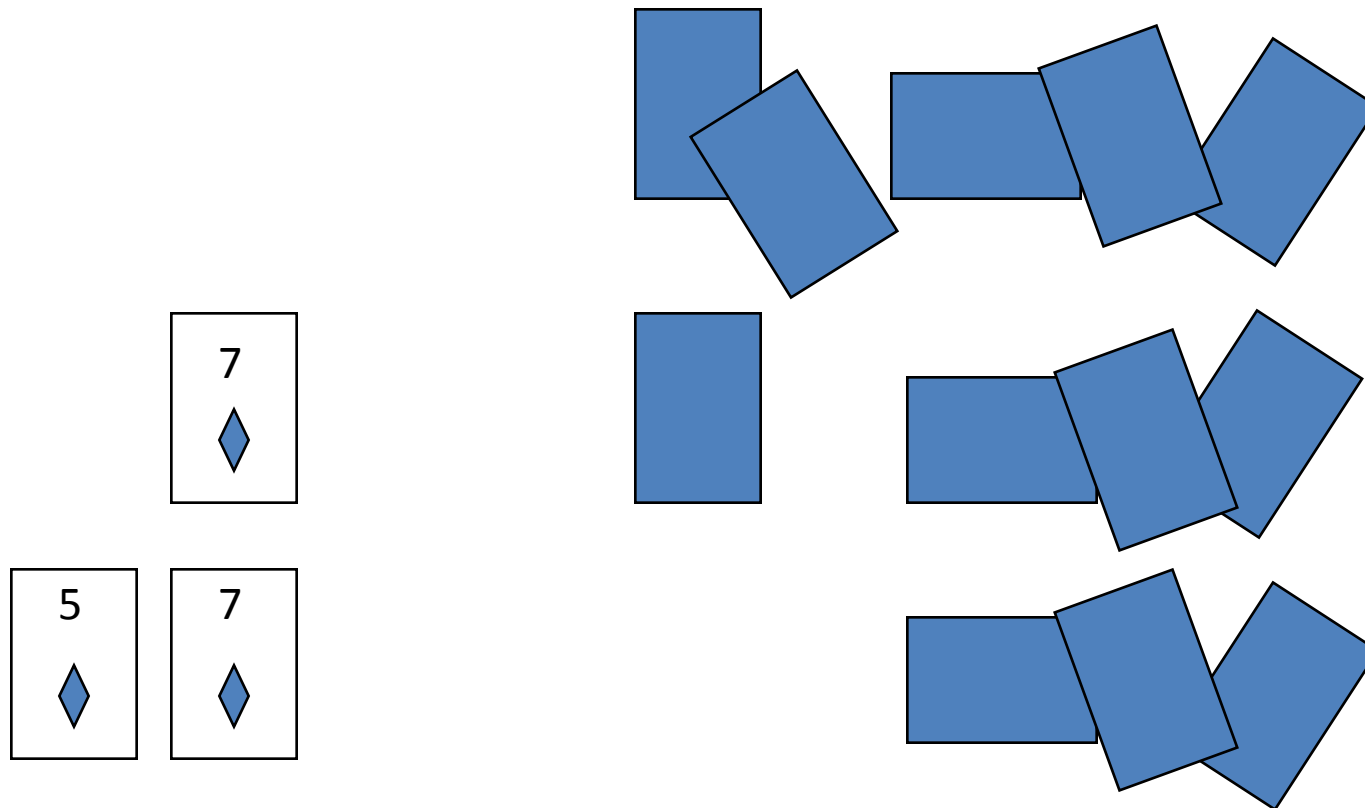


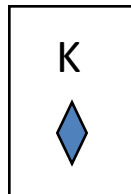
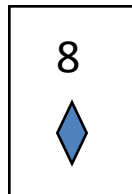
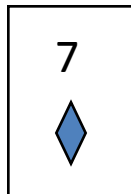
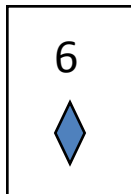
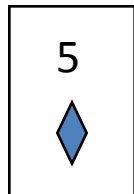
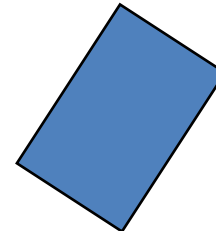
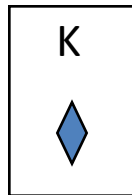
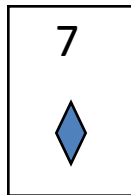
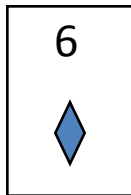
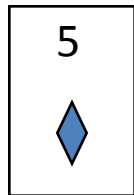
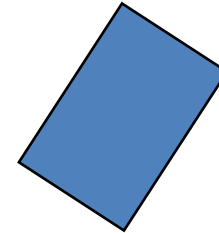
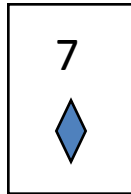
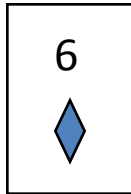
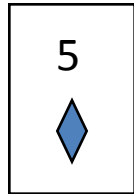
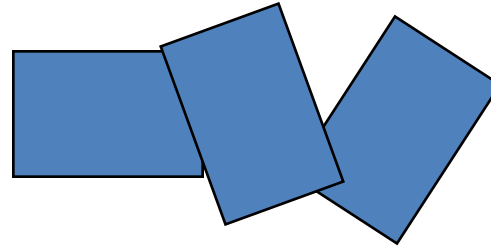
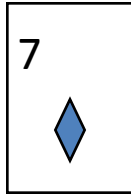
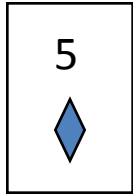
Insertion Sort

- Insertion sort is slower than quick sort, but not as slow as bubble sort, and it is easy to understand.
- Insertion sort works the same way as arranging your hand when playing cards.
 - Out of the pile of unsorted cards that were dealt to you, you pick up a card and place it in your hand in the correct position relative to the cards you're already holding.

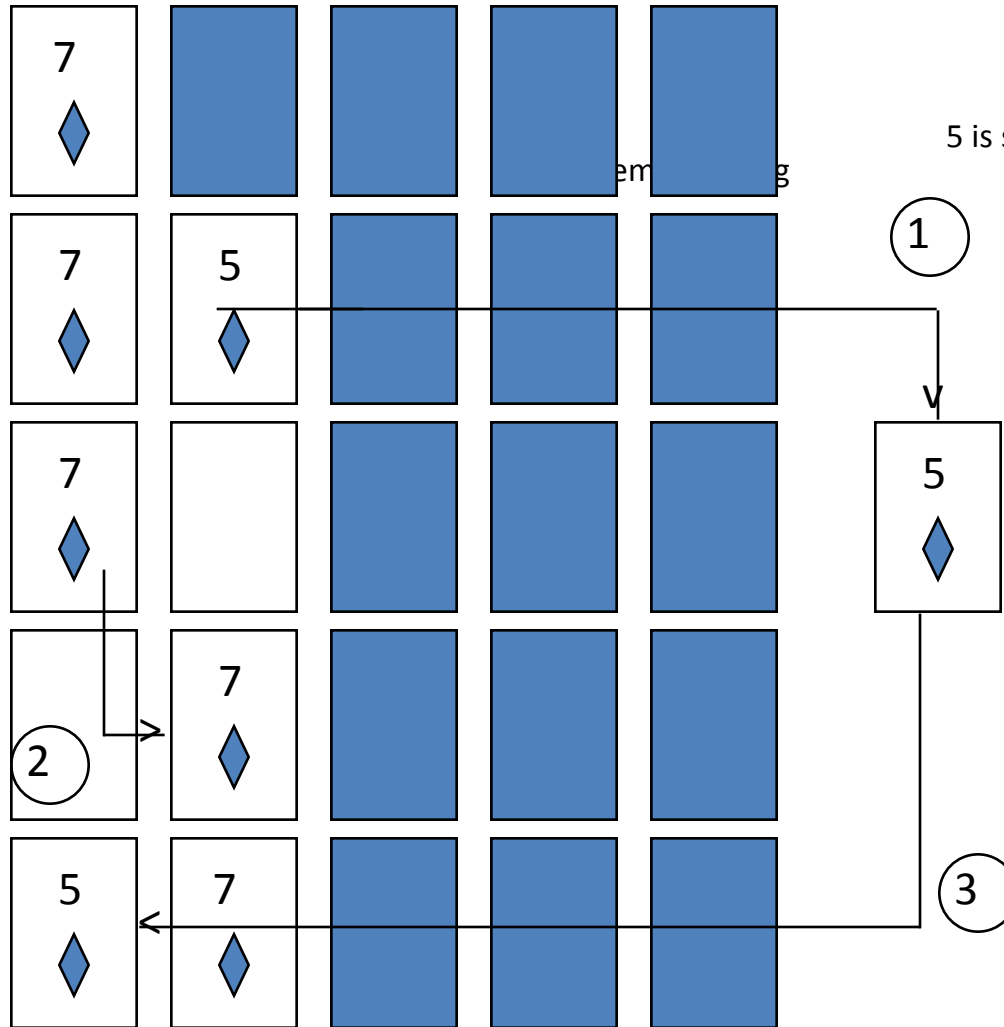
Arranging Your Hand



Arranging Your Hand



Insertion Sort



Unsorted - shaded

Look at 2nd item - 5.

Compare 5 to 7.

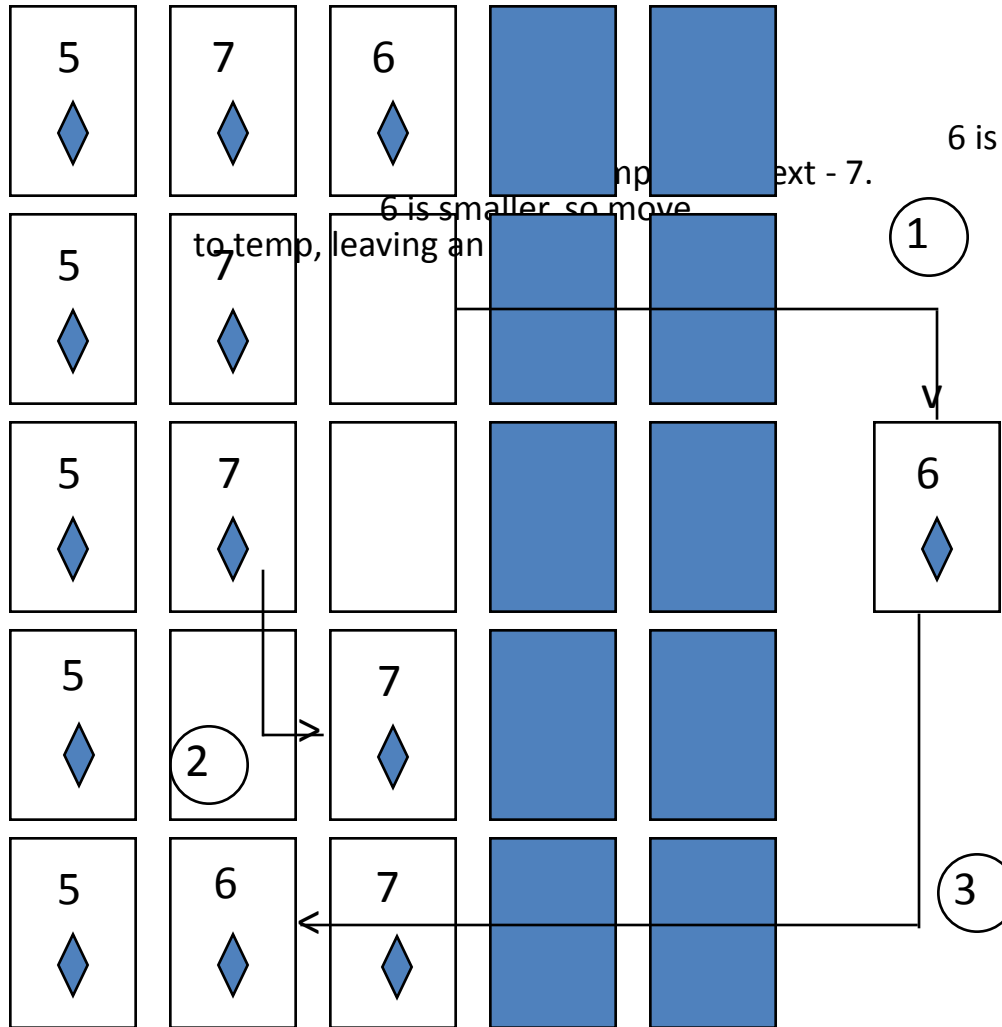
5 is smaller, so move 5

an empty slot in
position 2.

Move 7 into the empty
slot, leaving position 1
open.

Move 5 into the open
position.

Insertion Sort (con't)



Look at next item - 6.

Compare to 1st - 5.

6 is larger, so leave 5.

6

empty slot.

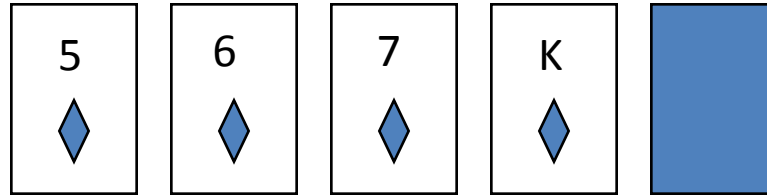
Move 7 into the empty slot, leaving position 2 open.

Move 6 to the open 2nd position.

Insertion Sort (con't)

Look at next item - King.

Compare to 1st - 5.



King is larger, so
leave 5 where it is.

Compare to next - 6.

King is larger, so
leave 6 where it is.

Compare to next - 7.

King is larger, so
leave 7 where it is.

Insertion Sort (con't)

