

# Selection Sort – Exercise

54	26	93	17	77	31	44	55	20
54	26	20	17	77	31	44	55	93
54	26	20	17	55	31	44	77	93
54	26	20	17	44	31	55	77	93
31	26	20	17	44	54	55	77	93
31	26	20	17	44	54	55	77	93
17	26	20	31	44	54	55	77	93
17	20	26	31	44	54	55	77	93
17	20	26	31	44	54	55	77	93

List to sort

PASS 1 ( 8 Comp, 1 Swap)

PASS 2 ( 7 Comp, 1 Swap)

PASS 3 ( 6 Comp, 1 Swap)

PASS 4 ( 5 Comp, 1 Swap)

PASS 5 ( 4 Comp, 0 Swap)

PASS 6 ( 3 Comp, 1 Swap)

PASS 7 ( 2 Comp, 1 Swap)

PASS 8 ( 1 Comp, 0 Swap)

Total PASS 8 (36 Comp, 6 Swap)

# Insertion Sort – Exercise

	54	26	93	17	77	31	44	55	20	List to sort
→										
pick 26 & inserted	26	→ 54	93							PASS 1 ( / Comp, / Shift)
pick 93 & inserted	26	54	93	17						PASS 2 ( / Comp, 0 Shift)
pick 17 & inserted	17	→ 26	→ 54	→ 93	77					PASS 3 ( 3 Comp, 3 Shift)
pick 77 & inserted	17	26	54	77	→ 93	31				PASS 4 ( 2 Comp, / Shift)
pick 31 & inserted	17	26	31	→ 54	→ 77	→ 93	44			PASS 5 ( 4 Comp, 3 Shift)
pick 44 & inserted	17	26	31	44	→ 54	→ 77	→ 93	55		PASS 6 ( 4 Comp, 3 Shift)
pick 55 & inserted	17	26	31	44	54	55	→ 77	→ 93	20	PASS 7 ( 3 Comp, 2 Shift)
pick 20 & inserted	17	20	→ 26	→ 31	→ 44	→ 54	→ 55	→ 77	→ 93	PASS 8 ( 8 Comp, 7 Shift)

Total PASS 8 (26 Comp, 20 Shift)