

# Module 8 Activity 3: -

1. 

E	A	S	Y	Q	U	E	S	T	I	O	N
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0 1 2 3 4 5 6 7 8 9 10 11

Comparisons Swaps  
(11) 1

i=0 min

~~A~~ A

A E S Y Q U E S T I O N

(10) (1)

i=1 min:

~~A~~ ~~E~~

A E S Y Q U E S T I O N

(9) (1)

i=2 min: ~~S~~ ~~E~~

A E E Y Q U S S T I O N

(8) (1)

i=3 min: ~~S~~ ~~E~~ ~~I~~

A E E I Q U S S T Y O N

(7) (1)

i=4 min: ~~S~~ ~~E~~ ~~N~~

A E E I N U S S T Y O Q

(6) (1)

i=5 min: ~~S~~ ~~E~~ ~~O~~

A E E I N O S S T Y U Q

(5) (1)

i=6 min: ~~S~~ ~~Q~~

A E E I N O Q S T Y U S

(4) (1)

i=7 min: ~~S~~

A E E I N O Q S T Y U S

(3) (1)

i=8 min: ~~S~~

A E E I N O Q S S Y U T

$i = 9$  min ~~X~~ ~~X~~ T

A E E I N O R S S T U Y

(2) (1)

(1) (1)

$i = 10$  min U

A E E I N O R S S T U Y

Time complexity -  $N^2$