

Question :

Show, how selection sort sorts the array E A S Y Q U E S T I O N.

Solution :

Consider an index which iterates up to the length of the Array given.

- Now the index is at E, the minimum element from the remaining array is A. So swap E and A. Now the array is

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

- Now the index is at E, the minimum element from the remaining array is E itself. So no swap. Now the array is

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

- Now the index is at S, the minimum element from the remaining array is E. So swap E and S. Now the array is

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

- Now the index is at Y, the minimum element from the remaining array is I. So swap Y and I. Now the array is

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

- Now the index is at Q, the minimum element from the remaining array is N. So swap Q and N. Now the array is

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

- Now the index is at U, the minimum element from the remaining array is O. So swap U and O. Now the array is

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

- Now the index is at S, the minimum element from the remaining array is Q. So swap S and Q. Now the array is

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

- Now the index is at S, the minimum element from the remaining array is S itself. So no swap. Now the array is

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

- Now the index is at T, the minimum element from the remaining array is S. So swap T and S. Now the array is

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

- Now the index is at Y, the minimum element from the remaining array is T. So swap Y and T. Now the array is

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

- Now the index is at U, the minimum element from the remaining array is U itself. So no swap. Now the final sorted array is

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