Array Game

**Description:**

To move the element in the single dimension array using arrow keys.

**Methods used :**

1.output: To represent the single dimension array in to 2D array.

2.Swapping: To swap the elements inside the array we created a swap method.

3.Game method: To the control the element inside the array we created the game method.

Code explanation:

**Main Method:**

Text

Description automatically generated

Size of the array

Creating array

Initializing the array

Calling the game method

The above code is used to create a single dimension array and initialize it. The 0 index in the array is initialized with 1 because our element starting position is 0 index and the remaining values are initialized with 0.

**Output Method:**

Text

Description automatically generated

Moving the cursor to the next line

Printing the values

The above output() method is used to represent the single dimension array in to 2D array.

**Swap Method:**

Text

Description automatically generated

The element gets shifted based upon the button

Swapping logic

Getting the index value of the element

The above method is used to shift the element inside the array.

**Game Method:**

Text

Description automatically generatedText

Description automatically generated

Taking Input for the button

Switch case conditions are used so that the element do not exceeds the corners of the array

This condition gets executed when we use arrow keys on the num pad(2,4,6,8)

Text

Description automatically generatedText

Description automatically generated

This condition is used so that the element do not exceeds the bottom of the array

This condition is used so that the element do not exceeds the left side of the array

This condition is used so that the element do not exceeds the top of the array

Text

Description automatically generatedText

Description automatically generated

If we enter wrong input this condition gets executed

To exit the array we use this condition

This condition is used so that the element moves inside the array

This condition is used so that the element do not exceeds the right side of the array

The above method controls the element and conditions are provided so that the element doesn’t cross the array.

**Output:**

A picture containing text

Description automatically generatedText

Description automatically generated with medium confidence

A picture containing text

Description automatically generated Graphical user interface

Description automatically generated with medium confidence

Text

Description automatically generated Text

Description automatically generated