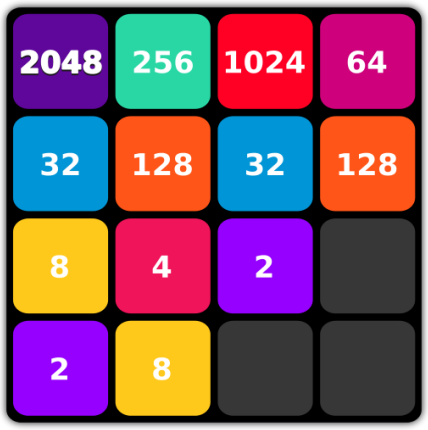
# Searching




1. Search this array using linear search. (first print it, then search it).

```
int num[]={16, 1, 516, 2048, 2, 64, 128, 256, 1024, 32, 4, 8};
```

2. Search this array using linear search. (first print it, then search it).

```
String months[]={"January", "February", "March", "April", "May", "June",
"July", "August", "September", "October", "November", "December"};
```

3. Search this array using linear search. (first print it, then search it).

```
String names []={"Sunflower", "Peashooter", "Cherry Bomb", "Wall-nut",
"Potato Mine", "Snow Pea", "Chomper", "Repeater", "Puff-Shroom", "Lily-Pad",
"Squash", "Threepeater", "Tangle Kelp", "Jalapeno"};
```

4. Search this array using linear search. (first print it, then search it).

```
int sun[]={50, 100, 150, 50, 25, 175, 150, 200, 0, 25, 50, 325, 25, 125};
```

5. Search this array using linear search. (first print it, then search it).

```
double moreNums[] ={3.45, 6.54, 7.89, 9.87, 2.34, 1.23, 5.78, 4.32, 6.45,
8.96, 9.07, 3.67, 0.34, 1.46, 1.47};
```

6. Search this array using linear search. (first print it, then search it).

```
char letters[]={'q', 'w', 'e', 'r', 't', 'y', 'u', 'i', 'o', 'p', 'a', 's',
'd', 'f', 'g', 'h', 'j', 'k', 'l', 'z', 'x', 'c', 'v', 'b', 'n', 'm'};
```

Code follows on the next page.

Starter:

```
public class searching {
    public static void main (String args[]) {
        new searching ();
    }

    public searching () {
        //#-1 - Numbers Array
        //(a) declare the array
        int array[] = {12, 23, 3, 41, 59, 6, 7, 81};
        //(b) print it out
        System.out.println ("The Numbers array:");
        for (int i = 0 ; i < array.length ; i++)
            System.out.print (array [i] + " ");
        System.out.println ();
        //(c) linear search it
        System.out.println ("Linear Search");
        int findMe = IO.inputInt ("What do you want to find in the array? ");
        int pos = -1;
        for (int i = 0 ; i < array.length ; i++) {
            if (array [i] == findMe)
                pos = i;
        }
        if (pos == -1)
            System.out.println ("The value is not in the array");
        else
            System.out.println ("The value is at position " + pos);
        System.out.println ();


        //#0 - Fruit Array
        //(a) Declare the array
        String fruit[] = {"eggplant", "apple", "peach", "cherry", "pear", "orange"};
        //(b) Print it out
        System.out.println ("The Fruit Array:");
        for (int i = 0 ; i < fruit.length ; i++)
            System.out.print (fruit [i] + " ");
        System.out.println ();
        //(c) Linear Search the array
        System.out.println ("Linear Search");
        String findFruit = IO.inputString ("What do you want to find in the array? ");
        int pos2 = -1;
        for (int i = 0 ; i < fruit.length ; i++) {
            if (fruit [i].equals (findFruit))
                pos2 = i;
        }
        if (pos2 == -1)
            System.out.println ("The value is not in the array");
        else
            System.out.println ("The value is at position " + pos2);
        System.out.println ();

        //TO DO: For each of the Arrays....
        // (a) add the array
        // (b) print it out
        // (c) linear search it


    }
}
```