

Assignment No.2

Subject: DATA STRUCTURE

Teacher Name: Sir, Muhammad Adil Asst:Prof.

Name: Amir Abbas BS.(S.E) ID:15499

Semester: 3rd

```
Main.java x
7 public static void main(String[] args) {
8     int[] a = {1,2,3,4};
9     int b = 0;
10    int c = a.length;
11    int d = 3;
12    boolean e = false;
13    while (b < a.length && !e) {
14        int x = ((b+c)/2);
15        if (d == a[x]) {
16            e = true;
17        }
18        else if (d < a[x]) {
19            b = x-1;
20        }
21        else {
22            b = x+1;
23        }
24    }
25    if (e) {
26        System.out.println("Search Successful");
27    }
28    else {
29        System.out.println("Search Unsuccessful");
30    }
}
```

Run: Main x

```
/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
Search Successful
```

```
5 public class Main {
6
7     public static void main(String[] args) {
8         int[] a = {1,2,3,4};
9         int b = 0;
10        int c = 3;
11        boolean d = false;
12        while (b < a.length && !d) {
13            if (a[b] == c) {
14                d = true;
15            }
16            else {
17                b++;
18            }
19        }
20        if (d) {
21            System.out.println("Search Successful");
22        }
23        else {
24            System.out.println("Search Unsuccessful");
25        }
26    }
27 }
```

Main

Run: Main x

/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
Search Successful

```
Main.java x
1 package com.codewithamirabbas;
2
3 public class Main {
4
5     public static void main(String[] args) {
6         int[] name_of_list = {1,2,3,4};
7         for (int value : name_of_list) {
8             System.out.println(value);
9         }
10    }
11 }
12
```

Run: Main x

```
/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
1
2
3
4

Process finished with exit code 0
```



```
Main.java x
1 package com.codewithamirabbas;
2
3 public class Main {
4
5     public static void main(String[] args) {
6         int[] a = {1,2,3,4};
7         int b = 0;
8         while (b < a.length) {
9             System.out.println(a[b]);
10            b++;
11        }
12    }
13 }
14
```

Run: Main x

```
/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
1
2
3
4

Process finished with exit code 0
```

```
Main.java x
2
3  import java.util.Arrays;
4
5  ▶ public class Main {
6
7  ▶  public static void main(String[] args) {
8      int[] a = {1,2,3,4};
9      System.out.println(Arrays.toString(a));
10     a = new int[]{1, 2, 3, 4, 5};
11     System.out.println(Arrays.toString(a));
12 }
13 }
14
```

Main > main()

Run: Main x

```

/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
[1, 2, 3, 4]
[1, 2, 3, 4, 5]

Process finished with exit code 0
```

```
Main.java x
2
3  import java.util.Arrays;
4
5  public class Main {
6
7  public static void main(String[] args) {
8      int[] a = {1,2,3,4};
9      System.out.println(Arrays.toString(a));
10     a = new int[]{1, 2, 3};
11     System.out.println(Arrays.toString(a));
12 }
13 }
14
```

Run: Main x

```
/Library/Java/JavaVirtualMachines/jdk-13.jdk/Contents/H
[1, 2, 3, 4]
[1, 2, 3]

Process finished with exit code 0
```