



```
package activity4b;

import java.util.Scanner;

public class Activity4B {
    static int num;

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter length of an array: ");
        int p = Integer.parseInt(scan.next());
        int[] o = new int[p];
        System.out.println("Enter all the "+ p +" elements: ");
        for(int u = 0; u < o.length; u++){
            o[u] = scan.nextInt();
        }

        int choice;
        System.out.println("Please Choose an option");
        System.out.println("(1) Insert a value ");
        System.out.println("(2) Delete a value ");
        System.out.println("(3) Traverse array ");
        System.out.println("(4) Exit ");
        System.out.println("Enter your choice: ");
        choice = scan.nextInt();
        switch (choice)
        {
            case 1:
                System.out.println("Enter location index: ");
                int loc = scan.nextInt();
                System.out.println("Enter value to insert: ");
                int val = scan.nextInt();
```

```
                System.out.println("Enter your choice: ");
                choice = scan.nextInt();
                switch (choice)
                {
                    case 1:
                        System.out.println("Enter location index: ");
                        int loc = scan.nextInt();
                        System.out.println("Enter value to insert: ");
                        int val = scan.nextInt();
                        for(int t = o.length-1; t > loc; t--){
                            o[t] = o[t-1];
                        }
                        o[loc] = val;
                        System.out.println("After inserting: ");
                        for(int a:o){
                            System.out.println(a);
                        }
                        break;

                    case 2:
                        System.out.println("Enter index location to delete: ");
                        int dlts = scan.nextInt();
                        for(int r = dlts; r < o.length-1; r++){
                            o[r] = o[r+1];
                        }
                        System.out.println(o[r]);
                        break;

                    case 3:
                        System.out.println("Traverse array: ");
                        for(int e = 0; e < o.length; e++){
```



```
35     o[loc] = val;
36     System.out.println("After inserting: ");
37     for(int a:o)
38         System.out.println(a);
39     }
40     break;
41
42     case 2:
43     System.out.println("Enter index location to delete: ");
44     int dltis = scan.nextInt();
45     for(int r = dltis; r<o.length-1; r++){
46         o[r] = o[r+1];
47         System.out.println(o[r]);
48     }
49     break;
50
51     case 3:
52     System.out.println("Traverse array: ");
53     for(int e = 0; e<o.length; e++){
54         System.out.println(o[e]);
55     }
56     break;
57
58     case 4:
59     System.out.println("Finish");
60     break;
61 }
62 }
63 }
64
65 }
```

Insert a value

```
run:
Enter length of an array: 8
Enter all the 8 elements:
232
23
5
6
97
5475
90
098

Please Choose :
(1) Insert a value
(2) Delete a value
(3) Traverse array
(4) Exit

Enter your choice: 1
Enter location index: 7
Enter value to insert: 1543
After inserting:
232
23
5
6
97
5475
90
1543
BUILD SUCCESSFUL (total time: 59 seconds)
```



## Delete a value

The screenshot shows the NetBeans IDE with the 'Delete a value' program running. The source code is as follows:

```
49 int dltis = scan.nextInt();
50 for(int r = dltis; r<o.length-1; r++){
    o.remove(r);
}
```

The output window shows the following interaction:

```
Enter length of an array: 7
Enter all the 7 elements:
23
545
7
3
23
542
545

Please Choose :
(1) Insert a value
(2) Delete a value
(3) Traverse array
(4) Exit

Enter your choice: 3
Enter index location to delete:
3
23
542
545
BUILD SUCCESSFUL (total time: 17 seconds)
```

## Traverse array

The screenshot shows the NetBeans IDE with the 'Traverse array' program running. The source code is as follows:

```
49 int dltis = scan.nextInt();
50 for(int r = dltis; r<o.length-1; r++){
    o.remove(r);
}
```

The output window shows the following interaction:

```
Enter length of an array: 6
Enter all the 6 elements:
32
2432
54
2432
342
54

Please Choose :
(1) Insert a value
(2) Delete a value
(3) Traverse array
(4) Exit

Enter your choice: 3
Traverse array:
32
2432
54
2432
342
54
BUILD SUCCESSFUL (total time: 11 seconds)
```



Exit

```
Activity4B - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
[default config]
Start Page x Activity02B_Capili_NW2C.java x Activity4B.java x
Source History
49 int dltis = scan.nextInt();
50 for(int r = dltis; r<o.length-1; r++){
Output - Activity4B (run) x
run:
Enter length of an array: 5
Enter all the 5 elements:
232
3
2
54
646
Please Choose :
(1) Insert a value
(2) Delete a value
(3) Traverse array
(4) Exit
Enter your choice: 4
Finish
BUILD SUCCESSFUL (total time: 0 seconds)
```