

```

1. import java.util.ArrayList;

class praj{

    public static void main(String[] args){

        ArrayList<String> obj=new ArrayList<String>();

        obj.add("Lion");

        obj.add("Bob Cat");

        obj.add("Tiger");

        obj.add(1,"DOG");//adding in the particular index

        for(String i:obj){

            System.out.println(i);//printing using for each

        }

    }

}

```

The screenshot displays the Programiz Online Java Compiler interface. The main editor area shows the following Java code:

```

1- import java.util.ArrayList;
2- class praj{
3-     public static void main(String[] args){
4-         ArrayList<String> obj=new ArrayList<String>();
5-         obj.add("Lion");
6-         obj.add("Bob Cat");
7-         obj.add("Tiger");
8-         obj.add(1,"DOG");//adding in the particular index
9-         for(String i:obj){
10-             System.out.println(i);//printing using for each
11-         }
12-     }
13- }
14-
15-

```

The output window on the right shows the execution results:

```

java -cp ./tmp/b41m4s10cz/praj
Lion
DOG
Bob Cat
Tiger

=== Code Execution Successful ===

```

The interface includes a sidebar with icons for file management, a top navigation bar with the Programiz logo and a "Programiz PRO" button, and a bottom status bar showing system information like temperature (35°C) and time (14:11 on 22-07-2024).

```
2. import java.util.ArrayList;

class praj{

    public static void main(String[] args){

        ArrayList<Integer> obj=new ArrayList<Integer>();

        obj.add(2);

        obj.add(4);

        obj.add(5);

        obj.add(6);

        obj.add(8);

        obj.add(9);

        System.out.println("The size of the arraylist is "+obj.size());//demonstrate size

        System.out.println("The element in the 2nd index position by using get method is  
"+obj.get(2));//get method

        System.out.println("The elements before setting: ");

        System.out.println(obj);

        obj.set(4,20);//set method

        System.out.println("The elements after setting: ");

        System.out.println(obj);

    }

}
```

The screenshot shows a web browser window with the URL `programiz.com/java-programming/online-compiler/`. The page features the Programiz logo and a navigation bar with "Premium Coding Courses by Programiz" and a "Programiz PRO" button. The main area is divided into two panels: "Main.java" on the left and "Output" on the right. The "Main.java" panel contains the following code:

```
1- import java.util.ArrayList;
2- class praj{
3-     public static void main(String[] args){
4-         ArrayList<Integer> obj=new ArrayList<Integer>();
5-         obj.add(2);
6-         obj.add(4);
7-         obj.add(5);
8-         obj.add(6);
9-         obj.add(8);
10        obj.add(9);
11        System.out.println("The size of the arraylist is "+obj.size()); //demonstrate size
12        System.out.println("The element in the 2nd index position by using get method is "
13        +obj.get(2)); //get method
14        System.out.println("The elements before setting: ");
15        System.out.println(obj);
16        obj.set(4,20); //set method
17        System.out.println("The elements after setting: ");
18        System.out.println(obj);
19    }
20 }
21
```

The "Output" panel shows the execution results:

```
java -cp ./tmp/P3p1cvt0L/ praj
The size of the arraylist is 6
The element in the 2nd index position by using get method is 5
The elements before setting:
[2, 4, 5, 6, 8, 9]
The elements after setting:
[2, 4, 5, 6, 20, 9]

=== Code Execution Successful ===
```

The bottom of the browser window shows a Windows taskbar with various icons and a system clock indicating 14:19 on 22-07-2024.

```
3. import java.util.ArrayList;
```

```
class praj{
```

```
    public static void main(String[] args){
```

```
        ArrayList<String> obj=new ArrayList<String>();
```

```
        obj.add("C");
```

```
        obj.add("C++");
```

```
        obj.add("Java");
```

```
        obj.add("Python");
```

```
        obj.add("Ruby");
```

```
        obj.add("Javascript");
```

```
        System.out.println("The elements before removing: ");
```

```
        System.out.println(obj);
```

```
        obj.remove(2);
```

```
        System.out.println("The elements after removing: ");
```

```
        System.out.println(obj);
```

```
        ArrayList<String> obj1=new ArrayList<String>();
```

```

obj1.add("Ruby");

obj1.add("Javascript");

System.out.println("The elements before removing using remove all: ");

System.out.println(obj);

obj.removeAll(obj1);

System.out.println("The elements after removing using remove all: ");

System.out.println(obj);

System.out.println("The elements before clearing: ");

System.out.println(obj);

obj.clear();

System.out.println("The elements after clearing: ");

System.out.println(obj);

}

}

```

The screenshot shows a web browser window with the URL `programiz.com/java-programming/online-compiler/`. The page features the Programiz logo and a navigation bar with options like 'Premium Coding Courses by Programiz' and 'Programiz PRO'. The main area is divided into two panels: 'Main.java' on the left and 'Output' on the right.

The 'Main.java' panel contains the following code:

```

1- import java.util.ArrayList;
2- class praj{
3-     public static void main(String[] args){
4-         ArrayList<String> obj=new ArrayList<String>();
5-         obj.add("C");
6-         obj.add("C++");
7-         obj.add("Java");
8-         obj.add("Python");
9-         obj.add("Ruby");
10-        obj.add("Javascript");
11-        System.out.println("The elements before removing: ");
12-        System.out.println(obj);
13-        obj.remove(2);
14-        System.out.println("The elements after removing: ");
15-        System.out.println(obj);
16-        ArrayList<String> obj1=new ArrayList<String>();
17-        obj1.add("Ruby");
18-        obj1.add("Javascript");
19-        System.out.println("The elements before removing using remove all: ");
20-        System.out.println(obj);
21-        obj.removeAll(obj1);
22-        System.out.println("The elements after removing using remove all: ");
23-        System.out.println(obj);
24-        System.out.println("The elements before clearing: ");
25-        System.out.println(obj);
26-        obj.clear();
27-        System.out.println("The elements after clearing: ");
28-        System.out.println(obj);
29-    }
30- }

```

The 'Output' panel shows the results of the program execution:

```

java -cp /tmp/ET6P0q/RSW/praj
The elements before removing:
[C, C++, Java, Python, Ruby, Javascript]
The elements after removing:
[C, C++, Python, Ruby, Javascript]
The elements before removing using remove all:
[C, C++, Python, Ruby, Javascript]
The elements after removing using remove all:
[C, C++, Python]
The elements before clearing:
[C, C++, Python]
The elements after clearing:
[]
=== Code Execution Successful ===

```

The bottom of the browser window shows a Windows taskbar with a search bar, system icons, and the date/time (22-07-2024, 14:30).

```
4. import java.util.ArrayList;

import java.util.Iterator;

import java.util.ListIterator;

class praj{

    public static void main(String[] args){

        ArrayList<String> obj=new ArrayList<String>();

        obj.add("Raja");

        obj.add("Ravi");

        obj.add("Ramu");

        obj.add("Vimal");

        obj.add("Roja");

        System.out.println("Printing using for each method: ");

        for(String i:obj){

            System.out.print(i+'\t');

        }

        System.out.println();

        System.out.println();

        System.out.println("Printing using iterator method : ");

        Iterator <String> iterator = obj.iterator();

        while (iterator.hasNext()){

            String Name = iterator.next();

            System.out.print(Name+" ");

        }

        System.out.println();

        System.out.println();

        System.out.println("Printing using List iterator method: ");

        ListIterator <String> listIterator = obj.listIterator();

        while (listIterator.hasNext()){

            String Name = listIterator.next();

            System.out.print(Name+" ");

        }

    }

}
```

```
}  
  
}
```

The screenshot shows a web browser window with the URL `programiz.com/java-programming/online-compiler/`. The page header includes the Programiz logo, a "Premium Coding Courses by Programiz" banner, and a "Programiz PRO" button. The main interface is divided into three sections: a file explorer on the left, a code editor in the center, and an output console on the right.

The file explorer shows a file named `Main.java`. The code editor contains the following Java code:

```
1 import java.util.ArrayList;  
2 import java.util.Iterator;  
3 import java.util.ListIterator;  
4 class praj{  
5     public static void main(String[] args){  
6         ArrayList<String> obj=new ArrayList<String>();  
7         obj.add("Raja");  
8         obj.add("Ravi");  
9         obj.add("Ramu");  
10        obj.add("Vimal");  
11        obj.add("Roja");  
12        System.out.println("Printing using for each method: ");  
13        for(String i:obj){  
14            System.out.print(i+" ");  
15        }  
16        System.out.println();  
17        System.out.println();  
18        System.out.println("Printing using iterator method: ");  
19        Iterator <String> iterator = obj.iterator();  
20        while (iterator.hasNext()){  
21            String Name = iterator.next();  
22            System.out.print(Name+" ");  
23        }  
24        System.out.println();  
25        System.out.println();  
26        System.out.println("Printing using list iterator method: ");  
27        ListIterator <String> listIterator = obj.listIterator();  
28        while (listIterator.hasNext()){  
29            String Name = listIterator.next();  
30            System.out.print(Name+" ");  
31        }  
32    }  
33 }  
34  
35
```

The output console on the right shows the following text:

```
Java - C:\Program Files\Java\jdk-11.0.10\bin\java.exe  
Printing using for each method:  
Raja Ravi Ramu Vimal Roja  
  
Printing using iterator method :  
Raja Ravi Ramu Vimal Roja  
  
Printing using list iterator method:  
Raja Ravi Ramu Vimal Roja  
=== Code Execution Successful ===
```

The bottom of the browser window shows a Windows taskbar with a search bar, several application icons, and system information including the temperature (35°C), weather (Mostly cloudy), and date/time (22-07-2024, 14:43).