1.Write a Java program to append the specified element to the end of a HashSet. [Hint:Add elements in the Set using add() method] Expected Output.

Solution:

import java.util.HashSet;

public class AppendToHashSet {

public static void main(String[] args) {

HashSet<String> hashSet = new HashSet<>();

hashSet.add("Apple");

hashSet.add("Banana");

hashSet.add("Orange");

System.out.println("HashSet before appending: " + hashSet);

hashSet.add("Mango");

System.out.println("HashSet after appending: " + hashSet);

}

}

Output:

HashSet before appending: [Orange, Banana, Apple]

HashSet after appending: [Mango, Orange, Banana, Apple]

2. Write a program to declare stack.Store 10 elements into it.Remove 4 elements from stack and display it.

Solution:

import java.util.Stack;

public class StackExample {

public static void main(String[] args) {

Stack<Integer> stack = new Stack<>();

for (int i = 1; i <= 10; i++) {

stack.push(i);

}

System.out.println("Stack before removal: " + stack);

System.out.println("Removed elements:");

for (int i = 0; i < 4; i++) {

int removed = stack.pop();

System.out.println(removed);

}

System.out.println("Stack after removal: " + stack);

}

}

Output:

Stack before removal: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Removed elements:

10

9

8

7

Stack after removal: [1, 2, 3, 4, 5, 6]