

Lab(30 mins): (Attempt any 2)

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:



```
sendToHashSet.java - Eclipse IDE
Window Help
File History Synchronize Git Staging Git Reflog Properties JUnit Console SonarLint Report
<terminated> AppendToHashSet [Java Application] C:\Program Files\Java\jdk1.8.0_231\bin\javaw.exe (11-Aug-2023, 6:23:48 pm - 6:23:50 pm) [pid: 15492]
Updated HashSet: [banana, date, apple, cherry]
```

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

Expected Output:



```
StackExample.java - Eclipse IDE
File History Synchronize Git Staging Git Reflog Properties JUnit Console SonarLint Report
<terminated> StackExample [Java Application] C:\Program Files\Java\jdk1.8.0_231\bin\javaw.exe (10-Aug-2023, 11:08:09 am - 11:08:10 am) [pid: 17324]
--elements--
[23, 33, 43, 53, 33, 63, 73, 83, 93, 13]
After remove
[23, 33, 43, 53, 33, 63]
```

3. Write a Java program that finds and prints the union of two sets. Then check if union set is a subset of set1 or not.

[Hint: Create two Set objects name set1 and set2 and copy both Set's elements into an another Set name unionSet. Utilize the containsAll() method to verify if the elements from set1 are present within the unionSet]

Set 1 Input:

apple
banana
cherry

Set 2 Input:

cherry

date
fig

Expected Output:



```
SetUnion.java - Eclipse IDE
File History Synchronize Git Staging Git Reflog Properties JUnit Console SonarLint Report
<terminated> SetUnion [Java Application] C:\Program Files\Java\jdk1.8.0_231\bin\javaw.exe (11-Aug-2023, 6:53:49 pm - 6:53:50 pm) [pid: 2220]
Union of sets: [banana, date, apple, cherry, fig]
unionSet is a subset of set1.
```

