

Java Programming

Assignment - 3

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① Array list operations

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

public class ArrayListOperations {
    public static void main(String[] args) {
        ArrayList<String> list = new ArrayList<>();
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter names to add");

        while (true) {
            String input = scanner.nextLine();
            if (input.equalsIgnoreCase("exit"))
                break;
            list.add(input);
        }

        System.out.print("Enter name to search");
        String searchname = scanner.next();
        int position = list.indexOf(searchname);

        if (position != -1) {
            System.out.println("found");
        }
        else {
            System.out.println("not found");
        }
    }
}
```

```

        System.out.println("current list elements");
        for (String name: list) {
            System.out.println(name);
        }
        Scanner.close();
    }

```

- ② Create a program that demonstrates that use of a hashset store connection of names, Add a name to the set and remove from set

```

①
import java.util.HashSet;
import java.util.Scanner;

class HashOperations {
    public static void main (String[] args) {
        HashSet (String) names = new HashSet <> ();
        System.out.println ("enter name to remove");
        names.remove (remove.name);
        System.out.print ("enter name to check");
        if (names.contains (check.name)) {
            System.out.println (check.name);
        }
    }
}

```



```

else {
    System.out.println (check names);
}
System.out.println ("current name");
for (String name : names) {
    System.out.println (name);
}
Scanner close();
}
}

```

- ③ write a java program that removes the use of a priority queue to store the employees, include functionality, add priorities and employee and display the queue.

Ⓐ

```

import java.util.priority queue;
import java.util.scanner;

public class priority queue operations {
    public static void main (string[] args) {
        priority queue <employee> queue;
        Scanner = new scanner (system.in);
        system.out.println ("enter employee name");
        while (true) {
            string input = scanner.nextLine();
            if (input.equals (ignore case ("exit")))
                break;
        }
    }
}

```

Static class employee implements Comparable
<employee> {

String name;

int priority;

employee (String name, int priority) {

this.name = name;

this.priority = priority;

}

public int compareTo (employee other) {

return Integer.compare (this.priority)

}

}

}

- ④ Create a Hash map that stores student IDs and their names your program should add key value Hashmap. Remove a student using a their ID display all student entries.

⑤

```
import java.util.HashMap;  
import java.util.Scanner;  
public class HashmapOperations {  
  
    public static void main (String[] args) {  
  
        HashMap <Integer, String> student map
```


variable

```
: new HashMap<>();
```

```
Scanner s = new Scanner(System.in);
```

```
System.out.print("enter student ID");
```

```
int search ID = scanner.nextInt();
```

```
if (student name != null) {
```

```
    System.out.println("-found student");
```

```
}
```

```
else {
```

```
    System.out.println("no student found");
```

```
}
```

```
System.out.print("enter student ID to remove");
```

```
int removeID = scanner.nextInt();
```

```
System.out.println("current student entries");
```

```
for (Integer id : student map.keySet()) {
```

```
    System.out.println("ID");
```

```
}
```

```
scanner.close();
```

```
}
```

```
}
```