

## LAB 0 Experiment

1. Install JDK (Java Development Kit) any version 1.5 or above and verify the correctness of installation.

```
Command Prompt
Microsoft Windows [Version 10.0.18363.1139]
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C:\Users\AYAAM CHOUDHARY>java -version
java version "1.8.0_271"
Java(TM) SE Runtime Environment (build 1.8.0_271-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.271-b09, mixed mode)

C:\Users\AYAAM CHOUDHARY>
```

2. Write the following Java program:  
(i) Write a Java program to find the minimum of a set of 10 numbers

```
1 import java.util.*;
2 public class Q1
3 {
4     public static void main(String args[])
5     {
6         Set<Integer> set = new HashSet<Integer>();
7         set.add(34);
8         set.add(653);
9         set.add(12);
10        set.add(96);
11        set.add(28);
12        set.add(84);
13        set.add(93);
14        set.add(372);
15        set.add(27);
16        set.add(90);
17        System.out.println("Set: " + set);
18        int minSet = Collections.min(set);
19        System.out.println("Minimum of the set is: " + minSet);
20    }
21 }
```

Java source file | length: 488 | lines: 21 | Ln: 1 Col: 1 Pos: 1 | Windows (CR LF) | UTF-8 | INS

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\AYAAM CHOUDHARY\Desktop\Agile>javac Q1.java

C:\Users\AYAAM CHOUDHARY\Desktop\Agile>java Q1
Set: [96, 34, 84, 372, 90, 27, 12, 28, 653, 93]
Minimum of the set is: 12
```

```
import java.util.*;
public class Q1
{
    public static void main(String args[])
    {
        Set<Integer> set = new HashSet<Integer>();
        set.add(34);
        set.add(653);
        set.add(12);
        set.add(96);
        set.add(28);
        set.add(84);
        set.add(93);
        set.add(372);
        set.add(27);
        set.add(90);
        System.out.println("Set: " + set);
        int minSet = Collections.min(set);
        System.out.println("Minimum of the set is: " + minSet);
    }
}
```

(ii) Write a Java program to compute the annual increment amount of employees using the following strategy:

- If the monthly salary of an employee is less than Rs. 1 Lakh increment should be 15 % of the annual salary
- If monthly salary is in the range of Rs.1 Lakh to Rs. 2 Lakh increment should be 10% of annual salary
- If the monthly salary is more than Rs. 2 Lakh increment should be 5% of the annual salary

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile\Q2.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Q2.java
1 import java.util.Scanner;
2 public class Q2
3 {
4     public static void main(String args[])
5     {
6         System.out.print("Enter your Salary: ");
7         Scanner inp = new Scanner(System.in);
8         double sal = inp.nextDouble();
9         if(sal<100000)
10        {
11            sal = (sal*12*0.15)+(sal*12);
12            System.out.println("Incremented Salary is: " +sal);
13        }
14        else if(100000<=sal & sal<200000)
15        {
16            sal = (sal*12*0.10)+(sal*12);
17            System.out.println("Incremented Salary is: " +sal);
18        }
19        else if(sal>=200000)
20        {
21            sal = (sal*12*0.05)+(sal*12);
22            System.out.println("Incremented Salary is: " +sal);
23        }
24    }
25 }
```

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile>javac Q2.java
```

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile>java Q2
```

```
Enter your Salary: 35000
Incremented Salary is: 483000.0
```

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile>java Q2
```

```
Enter your Salary: 150000
Incremented Salary is: 1980000.0
```

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile>java Q2
```

```
Enter your Salary: 505000
Incremented Salary is: 6363000.0
```

```
C:\Users\AYAAM CHOUDHARY\Desktop\Agile>
```

```
import java.util.Scanner;
public class Q2
{
    public static void main(String args[])
    {
        System.out.print("Enter your Salary: ");
        Scanner inp = new Scanner(System.in);
        double sal = inp.nextDouble();
        if(sal<100000)
        {
            sal = (sal*12*0.15)+(sal*12);
            System.out.println("Incremented Salary is: " +sal);
        }
        else if(100000<=sal & sal<200000)
        {
            sal = (sal*12*0.10)+(sal*12);
            System.out.println("Incremented Salary is: " +sal);
        }
        else if(sal>=200000)
        {
            sal = (sal*12*0.05)+(sal*12);
            System.out.println("Incremented Salary is: " +sal);
        }
    }
}
```