ASSIGNMENT_12

1) All Vowels:

```
package assignment12;

import java.util.LinkedHashSet;

import java.util.Scanner;

public class Assign12 {

public static void main(String[] a)

{

Scanner scan=new Scanner(System.in);

System.out.println("Enter the word");

String str=scan.next();

String
str1=str.replaceAll("[^aeiouAEIOU]", "");

LinkedHashSet <Character>set=new
LinkedHashSet<Character>();

for(int i=0;i<str1.length();i++)

set.add(str1.charAt(i));

if(set.size()==5)

System.out.println("Valid");

else
```

```
System.out.println("Invalid");
}
}
```

Output ;

```
Enter  the word
santaehiauonam
Valid
```

2)Employee Bonus:

```
package assignment12;
import java.util.HashMap;
import java.util.Map;
import java.util.Scanner;
import java.util.StringTokenizer;
import java.util.TreeMap;
public class EmpBonus {
public static void main(String[] args) {
```

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

int n=scan.nextInt();

int[] Id=new int[n];

String[] Date=new String[n];

HashMap<Integer,String> hm1=new
HashMap<Integer,String>();

HashMap<Integer,Integer> hm2=new
HashMap<Integer,Integer>();

TreeMap<Integer,Integer> t1=new
TreeMap<Integer,Integer>();

for(int i=0;i<n;i++)

{

System.out.println("Enter the Emp id");

int id=scan.nextInt();

Id[i]=id;

scan.nextLine();

System.out.println("Enter the date
format(dd-mm-yy)");

String date=scan.nextLine();

Date[i]=date;

System.out.println("Enter tha salary");
```

```
int salary=scan.nextInt();

hm1.put(id, date);

hm2.put(id, salary);

}

int d=0,y=0,m=0,sals=0;

for(int i=0;i<Date.length;i++) {

StringTokenizer st1= new
StringTokenizer(Date[i],"-");

while(st1.hasMoreTokens()) {

d=Integer.parseInt(st1.nextToken());

m=Integer.parseInt(st1.nextToken());

y=Integer.parseInt(st1.nextToken());

}

int age=0;

if(y<2014) {

age=2014-y;}

else {

System.out.println("Invalid Date");

}

if(age>25 && age<=30) {
```

```
sals=hm2.get(Id[i]);

sals=sals+((sals*2)/10);

}

else if(age>30 && age<=60) {

sals=hm2.get(Id[i]);

sals=sals+((sals*3)/10);

}

t1.put(Id[i],sals);

}

for(Map.Entry<Integer, Integer>
e:t1.entrySet()) {

System.out.println("Emp
Id:"+e.getKey()+"\nEmp
Salary:"+e.getValue());

}

}

}
```

Output: 2

```
Enter the Emp id
1010
Enter the date format(dd-mm-yy)
20-12-1987
Enter tha salary
10000
Enter the Emp id
1011
Enter the date format(dd-mm-yy)
1-1-1985
Enter tha salary
14400
Emp Id:1010
Emp Salary:12000
Emp Id:1011
Emp Salary:17280
```

3)Largest Key:

```
package assignment12;

import java.util.HashMap;

import java.util.Iterator;

import java.util.Scanner;

public class MaxValue {

public static String
getMaxValue(HashMap<Integer,String> a)

{

int max=0;

String str=null;

Iterator it=a.keySet().iterator();

while(it.hasNext()) {

int key=(int) it.next();

if(key>max)

{

max=key;

}

String val=a.get(max);

str=val;

}
```

```
return str;

}

public static void main(String[] args) {

Scanner scan=new Scanner(System.in);

System.out.println("Enter the Number:");

int n=scan.nextInt();

HashMap<Integer,String>HM=new
HashMap<Integer,String>();

for(int i=0;i<n;i++)

{

System.out.println("Enter the
keyNumber:");

int key=scan.nextInt();

scan.nextLine();

System.out.println("Enter the
keyValue:");

String value=scan.nextLine();

HM.put(key, value);

}

String val= MaxValue.getMaxValue(HM);

System.out.println("Max Value:" +val);
```

```
}
}
```

Out put:

```
Enter the keyNumber:
12
Enter the keyValue:
sandy
Enter the keyNumber:
15
Enter the keyValue:
santhanam
Max value: santhanam
```