1. Write a spell check program in Java. Create an appropriate collection object to store different common words like in a dictionary. Accept from the user words as long as he wants to and check it in dictionary for its correctness. If it in correct display so to the user. But if it is wrong then give the user an option to include it in the dictionary or ignore it. If user asks to include it add the word to the dictionary.
2. Write an address book class that manages a collection of Person objects. An address Book will allow a person to add, delete, or search for a Person object in the address book

* The add method should add a person object to the address book. Make sure the add method does not add duplicate person objects to the address book
* The delete method should remove the specified person object from the book

The search method that searches the address book for a specified person and returns the list of persons matching the specified criteria. The search can be done either by first name, last name, or person id.

1. Create an appropriate data structures to store employee object and use the java.util.package properties
2. Using the collection framework define an appropriate interface to user registration application

**1**

import java.util.Iterator;

import java.util.Map;

import java.util.Scanner;

import java.util.TreeMap;

public class Collection\_Treemap\_que1{

public static void main(String[]args) {

TreeMap <Integer, String> a = new TreeMap();

Scanner sc=new Scanner(System.in);

System.out.println("Enter your Keys and Values");

int Key1=sc.nextInt();

String value1=sc.next();

a.put(Key1,value1);

int Key2=sc.nextInt();

String value2=sc.next();

a.put(Key2,value2);

int Key3=sc.nextInt();

String value3=sc.next();

a.put(Key3,value3);

int Key4=sc.nextInt();

String value4=sc.next();

a.put(Key4,value4);

int Key5=sc.nextInt();

String value5=sc.next();

a.put(Key5,value5);

System.out.println("Keys and Values are"+a);

for (Map.Entry<Integer, String> element : a.entrySet())

{

System.out.println("Key= " + element.getKey() +","+ "Value= " + element.getValue());

}

System.out.println("Enter your keys and values to search in Dictionary");

Scanner sc1=new Scanner(System.in);

int keys=sc1.nextInt();

String values=sc1.next();

if((a.containsKey(keys) && a.containsValue(values)))

{

System.out.println("Entered Key is: " + keys+" "+"and Entered Value is " +values + " is present in dictionary.");

System.out.println("Keys and Values are"+a);

System.out.println("keys and values are present in Dictionary thats why Ignore it");

}

else

{

System.out.println("Entered Key is: " + keys+" "+"and Entered Value is" +values + " is not present in dictionary.");

System.out.println("DO you want to Add keys & values in our Dictionary Press");

TreeMap <Integer, String> aa = new TreeMap();

Scanner sc2 = new Scanner(System.in);

char ch=sc2.nextLine().charAt(0);

if(ch=='y' || ch=='Y')

{

System.out.println("How much element you want to add");

int k=sc2.nextInt();

String[] s1 = new String[k];

int[] arr = new int [k];

for(int j=0;j<s1.length;j++)

{

a.put(arr[j]=sc2.nextInt(),s1[j]=sc2.nextLine());

}

}

a.putAll(aa);

System.out.println(a);

}

}

}

2

import java.util.\*;

public class AddressBook {

public static void main(String[] args)

{

LinkedHashMap<Integer,String> hmap = new LinkedHashMap<Integer, String>();

System.out.println("Input ID & Full Name");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Scanner sc = new Scanner(System.in);

System.out.println("Enter your Address Book Size");

int size=sc.nextInt();

String[] full\_name= new String[size];

int[] id = new int [size];

System.out.println("Enter your ID and Full name");

for(int i=0;i<full\_name.length;i++)

{

hmap.put(id[i]=sc.nextInt(),full\_name[i]=sc.nextLine());

}

System.out.println(hmap);

ArrayList<String> name = new ArrayList<String>();

for(Map.Entry app : hmap.entrySet())

{

if(!(name.contains(app.getValue() )))

{

name.add(app.getValue().toString());

}

}

System.out.println("Your ID and Full name is");

for (String s : full\_name) {

System.out.println(s);

}

LinkedHashMap<Integer, String> hmap1 = new LinkedHashMap<Integer, String>();

System.out.println("Do you want to add more names and id's press y");

Scanner idp1 = new Scanner(System.in);

char ch=idp1.nextLine().charAt(0);

if(ch=='y' || ch=='Y')

{

System.out.println("How much element you want to add");

int el=idp1.nextInt();

String[] stringg = new String[el];

int[] arr = new int [el];

for(int j=0;j<stringg.length;j++)

{

hmap1.put(arr[j]=idp1.nextInt(),stringg[j]=idp1.nextLine());

}

}

hmap.putAll(hmap1);

System.out.println(hmap);

System.out.println("Do you want to remove any element then just remove id number of your full name");

int idj=idp1.nextInt();

hmap.remove(idj) ;

//String s=idp1.next();

//hmap.remove(s);

System.out.println("After Removing Your ID or Full Name - Person Object List is "+hmap);

}

}

3

import java.util.ArrayList;

import java.util.Iterator;

import java.util.Scanner;

public class EmployeeDetails

{

public static void main(String[] args)

{

ArrayList a=new ArrayList();

Scanner sc=new Scanner(System.in);

System.out.println("Enter Employee ID");

int id=sc.nextInt();

a.add(id);

System.out.println("Enter Employee Name");

String name=sc.next();

a.add(name);

System.out.println("Enter Employee Email ID");

String Email=sc.next();

a.add(Email);

System.out.println("Enter Employee Date Of Birthday");

String DOB=sc.next();

a.add(DOB);

System.out.println("Enter Employee Contact Number");

String Contact=sc.next();

a.add(Contact);

System.out.println("Enter Employee Gender");

String Gender=sc.next();

a.add(Gender);

System.out.println("Information Of First Employee is= "+a);

Iterator itr=a.iterator();

while (itr.hasNext())

{

System.out.println(itr.next());

}

System.out.println("Add another Employee Details in your List ");

ArrayList a1=new ArrayList();

Scanner sc1=new Scanner(System.in);

System.out.println("Enter Employee ID");

int id1=sc1.nextInt();

a1.add(id1);

System.out.println("Enter Employee Name");

String name1=sc1.next();

a1.add(name1);

System.out.println("Enter Employee Email ID");

String Email1=sc1.next();

a1.add(Email1);

System.out.println("Enter Employee Date Of Birthday");

String DOB1=sc1.next();

a1.add(DOB1);

System.out.println("Enter Employee Contact Number");

String Contact1=sc1.next();

a1.add(Contact1);

System.out.println("Enter Employee Gender");

String Gender1=sc1.next();

a1.add(Gender1);

System.out.println("Information of Second Employee");

System.out.println(a1);

Iterator itr1=a1.iterator();

while (itr1.hasNext())

{

System.out.println(itr1.next());

}

a.addAll(a1);

System.out.println("Information of Both Employee "+a);

Iterator itr3=a.iterator();

while (itr3.hasNext())

{

System.out.println(itr3.next());

}

System.out.println(a.contains("Akshay"));

System.out.println(a.containsAll(a1));

System.out.println(a.equals(a1));

System.out.println(a.get(5));

System.out.println(a.isEmpty());

System.out.println(a.lastIndexOf(Contact1));

a.remove(Gender1);

System.out.println(a);

a.set(3,"16/02/1997");

System.out.println();

System.out.println("After Applying Some Methods On List Information of Both Employee is= "+a);

}

}

4

Solution:

import java.util.HashMap;

import java.util.Map;

import java.util.Map.Entry;

import java.util.Scanner;

interface UserData

{

String getUsername();

String getpassword();

}

class User implements UserData

{

private String username ;

private String password ;

public User(String username, String password)

{

this.username = username;

this.password=password;

}

public String getUsername()

{

return username;

}

public String getpassword()

{

return password;

}

}

public class RegistrationInterface

{

public static void main(String[] args)

{

HashMap<String ,User> myUser = new HashMap<>();

Scanner s = new Scanner(System.in);

String username, password;

System.out.print("Enter username :: ");

username = s.nextLine();

System.out.print("Enter password :: ");

password = s.nextLine();

myUser.put(username,new User(username,password));

int length = username.length();

for(Map.Entry<String,User> e : myUser.entrySet())

{

try {

if(!e.getValue().getUsername().equalsIgnoreCase("akshaykanse1501@gmail.com"))

throw new ArithmeticException("Incorrect Username Please Enter Correct Username");

else if(!e.getValue().getpassword().equalsIgnoreCase("Akshay@12345"))

throw new Exception("Incorrect Password Please Enter Correct Password");

else

System.out.println("Login Successful !!!");

}

catch (ArithmeticException u) {

u.printStackTrace();

}

catch (Exception p) {

p.printStackTrace();

}

}

}

}