Problem#1

package com.mycompany.labassignemnt11;

import java.util.\*;

import java.io.\*;

import java.nio.file.\*;

public class FileTraverser

{

public static String reverse(String str)

{

if (str == null || str.equals(""))

return str;

List<Character> list = new ArrayList<Character>();

for (char c : str.toCharArray())

list.add(c);

Collections.reverse(list);

StringBuilder builder = new StringBuilder(list.size());

for (Character c : list)

builder.append(c);

return builder.toString();

}

public static void main(String[] args) throws IOException

{

try {

File myObj = new File("helloworld.txt");

if (myObj.createNewFile()) {

System.out.println("File created: " + myObj.getName());

} else {

System.out.println("File already exists.");

}

}

catch (IOException e) {

System.out.println("An error occurred.");

e.printStackTrace();

}

String content = new String ( Files.readAllBytes( Paths.get("helloworld.txt") ) );

List<String> myList = new ArrayList<String>(Arrays.asList(content.split("")));

Collections.reverse(myList);

System.out.print(myList);

File =new File("helloworld.txt");

FileWriter fw = new FileWriter(file);

BufferedWriter bw = new BufferedWriter(fw);

String listString = String.join("", myList);

bw.write(listString);

bw.close();

}

}

Problem#2

package com.mycompany.labassignemnt11;

import java.io.File;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

import java.io.IOException;

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

import java.util.ArrayList;

import java.util.Scanner;

public class Test {

public static ArrayList<Object> getObjects() throws FileNotFoundException, IOException, ClassNotFoundException{

ArrayList<Object> objects = new ArrayList<Object>();

FileInputStream fis = new FileInputStream("myObjects.ser");

ObjectInputStream ois = new ObjectInputStream(fis);

Employee obj =null;

boolean isExist = true;

while(isExist){

if(fis.available() != 0){

obj = (Employee) ois.readObject();

objects.add(obj);

}

else{

isExist =false;

}

}

return objects;

}

public static void main(String[] args) throws IOException, ClassNotFoundException

{

System.out.println("1- Add Employee Data to File");

System.out.println("2- Search Employee");

System.out.println("3- Exit");

Scanner input = new Scanner(System.in);

int choice = input.nextInt();

switch (choice) {

case 1:

{

try

{

File myObj = new File("myObjects.txt");

if (myObj.createNewFile())

{

System.out.println("File created: " + myObj.getName());

} else

{

System.out.println("File already exists.");

}

}

catch (IOException e)

{

System.out.println("An error occurred.");

} System.out.print("Enter the Name: ");

String name = input.next();

System.out.print("\nEnter the ID: ");

String id = input.next();

System.out.print("\nEnter the Income: ");

float income = input.nextFloat();

int i=Integer.parseInt(id);

Employee e1 = new Employee(name, i, income);

FileOutputStream f = new FileOutputStream("myObjects.ser");

ObjectOutputStream o = new ObjectOutputStream(f);

o.writeObject(e1);

o.close();

f.close();

break;

}

case 2:

{

ArrayList<Object> objects = getObjects();

System.out.print(objects);

System.out.print("Enter the Name: ");

String name = input.next();

Object a = name;

System.out.print("\nEnter the ID: ");

String id = input.next();

Object b = id;

for (Object o: objects )

{

if (o.equals(a) || o.equals(b))

{

System.out.print(o);

break;

}

}

}

default:

System.exit(0);

}

}

}