**LAB1**

**Q1**

interface AppleInterface {

default void doiPhone() {

System.out.println("iPhone");

}

}

interface BadSamsung {

default void doiPhone(String s) {

System.out.println(s);

}

}

class multinh implements AppleInterface,BadSamsung {

public static void main(String[] args) {

multinh m1 = new multinh();

m1.doiPhone(); // default method called

m1.doiPhone("We always copy the latest iPhone - Samsung"); // Will call BadSamsung with string param

}

}

**Q2**

import java.io.\*;

class exphand {

public static void main(String[] args) throws Exception {

System.out.println("Type the generation of the iPhone -");

InputStreamReader r=new InputStreamReader(System.in);

BufferedReader br=new BufferedReader(r);

String num=br.readLine();

int gen = Integer.parseInt(num);

String[] iPhoneArray = {"iPhone", "iPhone 3G", "iPhone 3GS","iPhone 4","iPhone 4S","iPhone 5","iPhone 5S","iPhone 6","iPhone 6S"};

try {

String selected = iPhoneArray[gen-1];

System.out.println("Selected iPhone is -"+selected);

}

catch(Exception e) {

System.out.print(e);

System.out.println("No such iPhone exists for this generation");

}

}

}

**Q3**

class ThreadMethod extends Thread {

Thread t;

String name;

String description;

ThreadMethod(String nam,String desc) {

description = desc;

name = nam;

}

public void run() {

System.out.println("Running "+name);

try {

System.out.println(name);

for(int i = 0; i <5; i++) {

System.out.println("Thread: " + description + ", " + i);

Thread.sleep(50);

}

}

catch(Exception e) {

System.out.println(name+" Interrupted "+e);

}

System.out.println(name+" exited");

}

public void start(){

System.out.println("Starting "+name);

if (t == null) {

t = new Thread (this,name);

t.start ();

}

}

}

class multhread {

public static void main(String[] args) {

ThreadMethod AppleThread = new ThreadMethod("Apple","Apple innovates");

AppleThread.start();

ThreadMethod SamsungThread = new ThreadMethod("Samsung","Samsung copies");

SamsungThread.start();

}

}

**Q4**

import java.io.\*;

class filehand {

public static void main(String[] args) throws Exception{

System.out.println("Give the file a name");

InputStreamReader r=new InputStreamReader(System.in);

BufferedReader br=new BufferedReader(r);

String fileName=br.readLine();

try{

FileWriter fw = new FileWriter(fileName);

fw.write("Apple will release the new iPhone in September,2017");

fw.close();

}

catch (Exception e) {

System.out.println(e);

}

try{

FileReader fr = new FileReader(fileName);

int i;

while((i=fr.read())!=-1)

System.out.print((char)i);

fr.close();

}

catch(Exception e) {

System.out.println(e);

}

}

}

**Q5**

**Employee.java**

package lab1;

public class Employee {

int salary;

String name;

Employee(String n) {

name = n;

salary = 20000;

}

public void salaryChange(int amt) {

if (amt >salary) {

int change = amt - salary;

System.out.println("Salary increased by "+change);

}

else {

int change = salary - amt;

System.out.println("Salary decreased by "+change);

}

}

public void empQuit() {

salary = 0;

}

public int getInfo() {

return salary;

}

}

**EmpHandler.java**

package lab1;

import java.io.\*;

public class EmpHandler {

public static void main(String[] args) {

Employee e1 = new Employee("Shubham");

System.out.println("Enter choice -");

System.out.println("1.Increase Salary\n2. Decrease Salary");

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

String str = br.readLine();

int ch = Integer.parseInt(str);

switch(ch) {

case 1:{

System.out.println("Enter amount to increase");

String amt = br.readLine();

int intAmt = Integer.parseInt(amt);

e1.salary += intAmt;

System.out.println("Salary = "+e1.getInfo);

}

break;

case 2: {

System.out.println("Enter amount to decrease");

String amt = br.readLine();

int intAmt = Integer.parseInt(amt);

e1.salary -= intAmt;

System.out.println("Salary = "+e1.getInfo);

}

break;

default: break;

}

}

}