**Java 11 Assignment**

1. import java.util.Scanner;

@FunctionalInterface

interface SI {

int formula(int x,int y,int z);

}

public class Simpleinterest {

public static void main(String[] args) {

int p,r,t;

Scanner sc = new Scanner(System.in);

System.out.println("Enter the value for principal : ");

p=sc.nextInt();

System.out.println("Enter the value for rate : ");

r=sc.nextInt();

System.out.println("Enter the value for time : ");

t=sc.nextInt();

//lambda expression to define the simple interest formula

SI s=(x,y,z)->(x\*y\*z)/100;

int simp = s.formula(p,r,t);

System.out.println("Simple interest : "+simp);

}

}

1. public class testvar {

public static void main(String[] args) {

//without initialization

var x;

x=10;

//not allowed as an element type of an array

var list[]= {1,2,3};

//Lambda expression needs an explicit target

var obj =(a,b)->(a+b);

}

}

1. import java.util.ArrayList;

import java.util.Arrays;

public class ToArray {

public static void main(String[] args) {

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

l.add("A");

l.add("quick");

l.add("brown");

l.add("fox");

l.add("jumps");

l.add("over");

l.add("the");

l.add("lazy");

l.add("dog");

String arr[] = l.toArray(String[]::new);

System.out.println(Arrays.toString(arr));

}

}

1. import java.io.IOException;

import java.nio.file.Files;

import java.nio.file.Path;

import java.util.Arrays;

public class Readfile {

public static void main(String[] args) {

// TODO Auto-generated method stub

int cnt=0;

var path = "C:\\Users\\SAIHCHIL\\StudentList.txt";

try {

String display = Files.readString(Path.of(path));

String strArray[] = display.split("\\s");

//System.out.println(Arrays.toString(strArray));

System.out.println("Names of the Students : ");

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

if(!strArray[i].isBlank() && !strArray[i].isEmpty()) {

cnt=cnt+1;

System.out.println(strArray[i].stripLeading().stripTrailing());

}

}

System.out.println("Number of the students in the file : "+cnt);

}catch(IOException e) {

e.printStackTrace();

}

}

}

1. import java.io.IOException;

import java.nio.file.Files;

import java.nio.file.Path;

import java.nio.file.StandardOpenOption;

import java.util.Scanner;

public class Writetofile {

public static void main(String[] args) {

// TODO Auto-generated method stub

var firstfile = "C:\\Users\\SAIHCHIL\\prices.txt";

var secondfile = "C:\\Users\\SAIHCHIL\\total.txt";

int val =1,pr,total=0;

String c="Yes";

try {

Scanner sc = new Scanner(System.in);

char ch;

do {

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

System.out.println("a.Insert new price \nb.View purchase Total \nc.Exit ");

System.out.println("Enter your choice: ");

ch = sc.next().charAt(0);

switch (ch) {

case 'a': do {

if(c.equals("Yes")) {

System.out.println("\nInsert "+val+" item price");

pr=sc.nextInt();

total=total+pr;

Files.writeString(Path.of(firstfile), String.valueOf(pr),StandardOpenOption.APPEND);

System.out.println("---Price has been saved to the file---");

System.out.println("\*\*\*Do u want to enter price for more items?(Yes/No)\*\*\*");

c=sc.next();

val=val+1;

}else {

break;

}

}while(c!="Yes");

break;

case 'b':

Files.writeString(Path.of(secondfile), String.valueOf(total),StandardOpenOption.APPEND);

String totprice = Files.readString(Path.of(secondfile));

System.out.println(totprice);

break;

case 'c':

System.out.println("See you soon!!");

}

} while (ch != (int)'c');

}catch(IOException e) {

e.printStackTrace();

}

}

}

1. import java.io.IOException;

import java.net.URI;

import java.net.http.HttpClient;

import java.net.http.HttpRequest;

import java.net.http.HttpResponse;

import java.net.http.HttpClient.Version;

import java.net.http.HttpResponse.BodyHandlers;

public class Httprequest {

public static void main(String[] args) {

String uri = "https://httpbin.org/get";

HttpRequest request = HttpRequest.newBuilder()

.uri(URI.create(uri))

.GET()

.version(Version.HTTP\_2)

.build();

HttpClient client = HttpClient.newBuilder().build();

try

{

HttpResponse<String> response = client.send(request, BodyHandlers.ofString());

System.out.println(response.headers());

System.out.println(response.statusCode());

System.out.println(response.body());

}

catch(IOException | InterruptedException e)

{

e.printStackTrace();

}

}

}