**Assignment 10**

**1]ANS:-**

import java.util.Scanner;

public class SimpleInterest

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.println("Enter Amount: ");

int amt = sc.nextInt();

System.out.println("Enter Rate:" );

int rate = sc.nextInt();

System.out.println("Enter Time: ");

int time = sc.nextInt();

Interest inter = (int a, int b, int c) -> (a\*b\*c)/100;

int res = inter.calculate(amt, rate, time);

System.out.println("Simple Interest: "+res);

}

}

interface Interest

{

int calculate(int amt, int rate, int time);

}

**OUTPUT:-**

Enter Amount:

25000

Enter Rate:

5

Enter Time:

3

Simple Interest:

3750

**2]ANS:-**

**i) var cannot be used in an instance and global variable declaration.**

class Ex1 {

var a = 1206;

public static void main(String[] args)

{

System.out.println(a);

}

}

**Output:-**

prog.java:8: error: 'var' is not allowed here

var a = 1206;

^

1 error

**ii) var cannot be used as a Generic type.**

import java.util.\*;

class Ex2 {

public static void main(String[] args)

{

var<var> al = new ArrayList<>();

al.add(12);

al.add(60);

al.add(99);

System.out.println(al);

}

}

**Output:-**

prog.java:10: error: 'var' is not allowed here

var<var> al = new ArrayList<>();

^

1 error

**3]ANS:-**

import java.util.ArrayList;

import java.util.Arrays;

import java.util.List;

public class String1 {

public static void main(String[] args)

{

String str = "A quick brown fox jumps over the lazy dog";

String words[] = str.split(" ");

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

for(String text:words) {

l.add(text);

}

System.out.println(l);

//java11

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

System.out.println("In java 11 features : " + Arrays.toString(array));

}

}

**OUTPUT:-**

[A, quick, brown, fox, jumps, over, the, lazy, dog]

In java 11 features: [A, quick, brown, fox, jumps, over, the, lazy, dog]

**4]ANS:-**

import java.io.IOException;

import java.nio.file.Files;

import java.nio.file.Path;

import java.nio.file.Paths;

public class File

{

public static void main(String[] args)

{

Path filePath = Paths.get("C:/","Users","rushi","Desktop","StudentList.txt");

try

{

String line;

int count =0;

String content = Files.readString(filePath);

System.out.println(content);

String words[] = content.split(" ");

count = count + words.length;

System.out.println("Total Name Count: " + count);

}

catch (IOException o)

{

o.printStackTrace();

}

}

}

OUTPUT:

Rushikesh Rutuja Gajanan Gopal Chanda

Total Name Count : 5

**5ANS:-**

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) {

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

var secondfile = "C:\\Users\\rushi\\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();

}

}

}

**Output:-**

\*\*\*Menu\*\*\*

a.Insert new price

b.View purchase Total

c.Exit

Enter your choice:

a

Insert 1 item price

100

---Price has been saved to the file---

\*\*\*Do u want to enter price for more items?(Yes/No)\*\*\*

Yes

Insert 2 item price

300

---Price has been saved to the file---

\*\*\*Do u want to enter price for more items?(Yes/No)\*\*\*

Yes

Insert 3 item price

51

---Price has been saved to the file---

\*\*\*Do u want to enter price for more items?(Yes/No)\*\*\*

No

\*\*\*Menu\*\*\*

a.Insert new price

b.View purchase Total

c.Exit

Enter your choice:

b

Total price of all items is :451

\*\*\*Menu\*\*\*

a.Insert new price

b.View purchase Total

c.Exit

Enter your choice:

c

See you soon!!

**6]ANS:-**

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 UrlExample {

public static void main(String[] args) {

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

HttpRequest req = HttpRequest.newBuilder().uri(URI.create(uri)).GET().version(Version.HTTP\_2).build();

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

try {

HttpResponse<String> resp = client.send(req,BodyHandlers.ofString());

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

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

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

}

catch (IOException | InterruptedException e)

{

e.printStackTrace();

}

}

}

**Output:-**

java.net.http.HttpHeaders@1fd95305 { {:status=[200], access-control-allow-credentials=[true],

access-control-allow-origin=[\*], content-length=[246],

content-type=[application/json], date=[Sat, 22 Jan 2022 04:15:26 GMT],

server=[gunicorn/19.9.0]} }

200

{

"args": {},

"headers": {

"Host": "httpbin.org",

"User-Agent": "Java-http-client/17.0.1",

"X-Amzn-Trace-Id": "Root=1-61eb84de-267f2ddd4bbc02e151822744"

},

"origin": "223.235.168.68",

"url": "https://httpbin.org/get"

}