1)

**package** java11;

**import** java.util.Scanner;

**public** **class** SimpleIntrest {

**public** **static** **void** main(String[] args) {

Scanner sc=**new** Scanner(System.***in***);

System.***out***.println("Enter Principal Amount, Rate of Interest & No. of Years: ");

**double** principal=sc.nextDouble();

**double** roi=sc.nextDouble();

**double** years=sc.nextDouble();

SimpleInterestInterface calculateSI = (a, b, c)->((a\*b\*c)/100);

System.***out***.println("Total Interest : " + calculateSI.calculate(principal, roi, years));

}

}

**package** java11;

@FunctionalInterface

**public** **interface** SimpleInterestInterface {

**double** calculate(**double** a, **double** b, **double** c);

}

3)

**package** java11;

**import** java.util.ArrayList;

**import** java.util.Arrays;

**import** java.util.List;

**public** **class** ArrayList3 {

**public** **static** **void** main(String[] args) {

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

List<String> strList = **new** ArrayList<String>(Arrays.*asList*(str.split(" ")));

Object[] newstr = strList.toArray();

**for** (Object word : newstr) {

System.***out***.println(word);

}

}

}

4)

import java.io.File;

import java.nio.file.Path;

import java.util.Collections;

import java.util.List;

import java.util.stream.Collectors;

public class Java11\_4 {

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

var path = "C:\\Users\\Vinod R\\OneDrive\\Desktop\\work\\StudentList.txt";

List<String> str = Files.readAllLines(Path.of(path));

long count = str.stream().filter(l -> !(l.isBlank())).count();

System.out.println(str.stream().filter(l -> !(l.isBlank())).map(l-> l.strip()).collect(Collectors.toList()) + "\nThere are " +count + " Students");

}

6)

import java.io.IOException;

import java.net.URI;

import java.net.http.HttpClient;

import java.net.http.HttpRequest;

import java.net.http.HttpResponse;

public class Java11\_6 {

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

String url = "http://httpbin.org/get";

var request = HttpRequest.newBuilder()

.uri(URI.create(url))

.GET()

.build();

var client = HttpClient.newHttpClient();

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

System.out.println("Status Code: " + response.statusCode());

System.out.println("Response: " + response.body());

}

}