

```
1. import java.util.ArrayList;

import java.util.List;

public class Student {

    private int student_id;

    private String student_name;

    private List<Double> grades;


    public Student(int student_id, String student_name) {

        this.student_id = student_id;

        this.student_name = student_name;

        this.grades = new ArrayList<>();

    }

    public int getStudent_id() {

        return student_id;

    }

    public void setStudent_id(int student_id) {

        this.student_id = student_id;

    }

    public String getStudent_name() {

        return student_name;

    }

    public void setStudent_name(String student_name) {

        this.student_name = student_name;

    }

    public void addGrade(double grade) {

        if (grade >= 0.0 && grade <= 100.0) {

            grades.add(grade);

        } else {

            System.out.println("Invalid grade. Please enter a grade between 0 and 100.");

        }

    }

}
```

```

public List<Double> getGrades() {
    return new ArrayList<>(grades);
}

public void displayStudentInfo() {
    System.out.println("Student ID: " + student_id);
    System.out.println("Student Name: " + student_name);
    System.out.println("Grades: " + grades);
}

public static void main(String[] args) {
    Student student = new Student(1, "Alice");
    student.setStudent_id(101);
    student.setStudent_name("Alice Johnson");
    student.addGrade(85.5);
    student.addGrade(92.0);
    student.addGrade(76.3);
    student.addGrade(150.0);
    student.displayStudentInfo();
}
}

```

The screenshot shows a web browser window with the URL `programiz.com/java-programming/online-compiler/`. The page features a dark-themed editor with a file named `Main.java`. The code in the editor is as follows:

```

1 import java.util.ArrayList;
2 import java.util.List;
3 public class Student {
4     private int student_id;
5     private String student_name;
6     private List<Double> grades;
7
8     public Student(int student_id, String student_name) {
9         this.student_id = student_id;
10        this.student_name = student_name;
11        this.grades = new ArrayList<>();
12    }
13    public int getStudent_id() {
14        return student_id;
15    }
16    public void setStudent_id(int student_id) {
17        this.student_id = student_id;
18    }
19    public String getStudent_name() {
20        return student_name;
21    }
22    public void setStudent_name(String student_name) {
23        this.student_name = student_name;
24    }
25    public void addGrade(double grade) {

```

The `Run` button has been clicked, and the output is displayed on the right side of the editor. The output shows the execution of the `main` method, which creates a `Student` object and calls `displayStudentInfo()`. The output is as follows:

```

java -cp /tmp/xTD11RVK9t/Student
Invalid grade. Please enter a grade between 0 and 100.
Student ID: 101
Student Name: Alice Johnson
Grades: [85.5, 92.0, 76.3]

=== Code Execution Successful ===

```

The bottom of the screenshot shows a Windows taskbar with the date and time set to 10:32 on 04-08-2024.

```
2. import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileReader;

import java.io.BufferedReader;

import java.io.IOException;


public class Main {

    public static void readFile(String fileName) throws FileNotFoundException {

        File file = new File(fileName);

        if (!file.exists()) {

            throw new FileNotFoundException("File not found: " + fileName);

        } else {

            try (BufferedReader br = new BufferedReader(new FileReader(file))) {

                String line;

                while ((line = br.readLine()) != null) {

                    System.out.println(line);

                }

            } catch (IOException e) {

                System.out.println("An error occurred while reading the file: " + e.getMessage());

            }

        }

    }

}


public static void main(String[] args) {

    String fileName = "test.txt";


    try {

        readFile(fileName);

    } catch (FileNotFoundException e) {

        System.out.println("Exception: " + e.getMessage());

    }

}
```

```
}  
  
}
```

Online Java Compiler - Programiz

programiz.com/java-programming/online-compiler/

Programiz  
Online Java Compiler

Dell 15 Thin & Light Laptop, 12th Gen Intel Core i5-1235U Processor, 8GB, 512G...  
★★★★☆ 832  
-24% \*46,990<sup>00</sup> ₹62,092.00 ✓prime

Programiz PRO >

Main.java

```
1 import java.io.File;  
2 import java.io.FileNotFoundException;  
3 import java.io.FileReader;  
4 import java.io.BufferedReader;  
5 import java.io.IOException;  
6  
7 public class Main {  
8     public static void readFile(String fileName) throws FileNotFoundException {  
9         File file = new File(fileName);  
10        if (!file.exists()) {  
11            throw new FileNotFoundException("File not found: " + fileName);  
12        } else {  
13            try (BufferedReader br = new BufferedReader(new FileReader(file)))  
14            {  
15                String line;  
16                while ((line = br.readLine()) != null) {  
17                    System.out.println(line);  
18                }  
19            } catch (IOException e) {  
20                System.out.println("An error occurred while reading the file: "  
21                    + e.getMessage());  
22            }  
23        }  
24    }  
25 }
```

Output

```
java -cp /tmp/UB4HQtbEr/Main  
Exception: File not found: test.txt  
  
=== Code Execution Successful ===
```

31°C Mostly cloudy

Search

ENG IN 10:32 04-08-2024