

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.Comparator;
import java.util.HashMap;
import java.util.HashSet;
import java.util.Iterator;

public class studentmanagementsystem {
    public studentmanagementsystem() {
    }

    public static void main(String[] var0) {
        ArrayList var1 = new ArrayList();
        var1.add(new Student(1, "Amit", 85));
        var1.add(new Student(2, "Neha", 90));
        var1.add(new Student(3, "Ravi", 78));
        var1.add(new Student(2, "Neha", 90));
        HashSet var2 = new HashSet(var1);
        var1 = new ArrayList(var2);
        HashMap var3 = new HashMap();
        Iterator var4 = var1.iterator();

        Student var5;
        while(var4.hasNext()) {
            var5 = (Student)var4.next();
            var3.put(var5.id, var5);
        }

        Collections.sort(var1, new Comparator<Student>() {
            public int compare(Student var1, Student var2) {
                return var2.marks - var1.marks;
            }
        });
    }
}
```

```
    }

});

System.out.println("ID\tName\tMarks");
System.out.println("-----");
var4 = var1.iterator();

while(var4.hasNext()) {
    var5 = (Student)var4.next();
    System.out.println(var5.id + "\t" + var5.name + "\t" + var5.marks);
}

System.out.println("\nSearching student with ID 2:");
Student var6 = (Student)var3.get(2);
System.out.println(var6.name + " - " + var6.marks);
}
```

```
C:\Users\madha\OneDrive\Desktop\sanika>javac studentmanagementsystem.java
[0.022s][warning][cds] A jar file is not the one used while building the shared ar
chive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-e
xtension-pack-jdk\java\21\lib\modules
[0.022s][warning][cds] A jar file is not the one used while building the shared ar
chive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-e
xtension-pack-jdk\java\21\lib\modules
[0.022s][warning][cds] C:\Users\madha\AppData\Roaming\Code\User\globalStorage\plei
ades.java-extension-pack-jdk\java\21\lib\modules timestamp has changed.
```

```
C:\Users\madha\OneDrive\Desktop\sanika>java studentmanagementsystem
[0.023s][warning][cds] A jar file is not the one used while building the shared ar
chive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-e
xtension-pack-jdk\java\21\lib\modules
[0.024s][warning][cds] A jar file is not the one used while building the shared ar
chive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-e
xtension-pack-jdk\java\21\lib\modules
[0.024s][warning][cds] C:\Users\madha\AppData\Roaming\Code\User\globalStorage\plei
ades.java-extension-pack-jdk\java\21\lib\modules timestamp has changed.
ID      Name     Marks
-----
2       Neha     90
1       Amit     85
3       Ravi     78
```

```
Searching student with ID 2:
Neha - 90
```

```
C:\Users\madha\OneDrive\Desktop\sanika>
```

The screenshot shows a Java project named "SANIKA" in the left sidebar. The terminal tab is active at the top, displaying the following command and its output:

```
Microsoft Windows [Version 10.0.26100.4946]
(c) Microsoft Corporation. All rights reserved.

C:\Users\madha\OneDrive\Desktop\sanika> cmd /C "C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pack-jdk\java\21\bin\java.exe -XX:+ShowCodeDetailsInExceptionMessages -cp C:\Users\madha\AppData\Roaming\Code\User\workspaceStorage\8ed50f06b353f9154a01ab3563ee4ec2\redhat.java\jdt_ws\sanika_ce92ae38\b in studentmanagementsystem"

[0.019s][warning][cds] A jar file is not the one used while building the shared archive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pack-jdk\java\21\lib\modules
[0.020s][warning][cds] A jar file is not the one used while building the shared archive file: C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pack-jdk\java\21\lib\modules
[0.020s][warning][cds] C:\Users\madha\AppData\Roaming\Code\User\globalStorage\pleiades.java-extension-pack-jdk\java\21\lib\modules timestamp has changed.

ID      Name      Marks
-----
2      Neha      90
1      Amit      85
3      Ravi      78

Searching student with ID 2:
Neha - 90

C:\Users\madha\OneDrive\Desktop\sanika>
```