

```
postgres=# \d marksheet;
```

Table "public.marksheet"				
Column	Type	Collation	Nullable	Default
admno	integer			
name	character varying(30)			
mark1	numeric			
marks2	numeric			
total	numeric			
average	numeric			
result	character varying(10)			

```
postgres=#
```

Defining the 'Marksheet' Class for Data Representation:

```
database2 Version control Marksheet.java [C:\Users\Veersingh Lodhi\... Current File >
application.properties Database2Application.java Marksheet.java x markSheetRepository.java

1 package com.database2.database2.Assignment;
2 import jakarta.persistence.Entity;
3 import jakarta.persistence.Id;
4 @Entity 4 usages
5 public class Marksheet {
6     @Id 2 usages
7     int admno;
8     String name,result; 2 usages
9     double mark1,mark2,total,average; 2 usages
10    public int getAdmno() { no usages
11        return admno;
12    }
13    public void setAdmno(int admno) { 1 usage
14        this.admno = admno;
15    }
16    public String getName() { no usages
17        return name;
18    }
19    public void setName(String name) { 1 usage
20        this.name = name;
21    }
22    public String getResult() { no usages
23        return result;
24    }
25    public void setResult(String result) { 1 usage
```

database2 Version control Marksheet.java [C:\Users\veersingh Lodhi\... Current File

application.properties Database2Application.java Marksheet.java x markSheetRepository.java

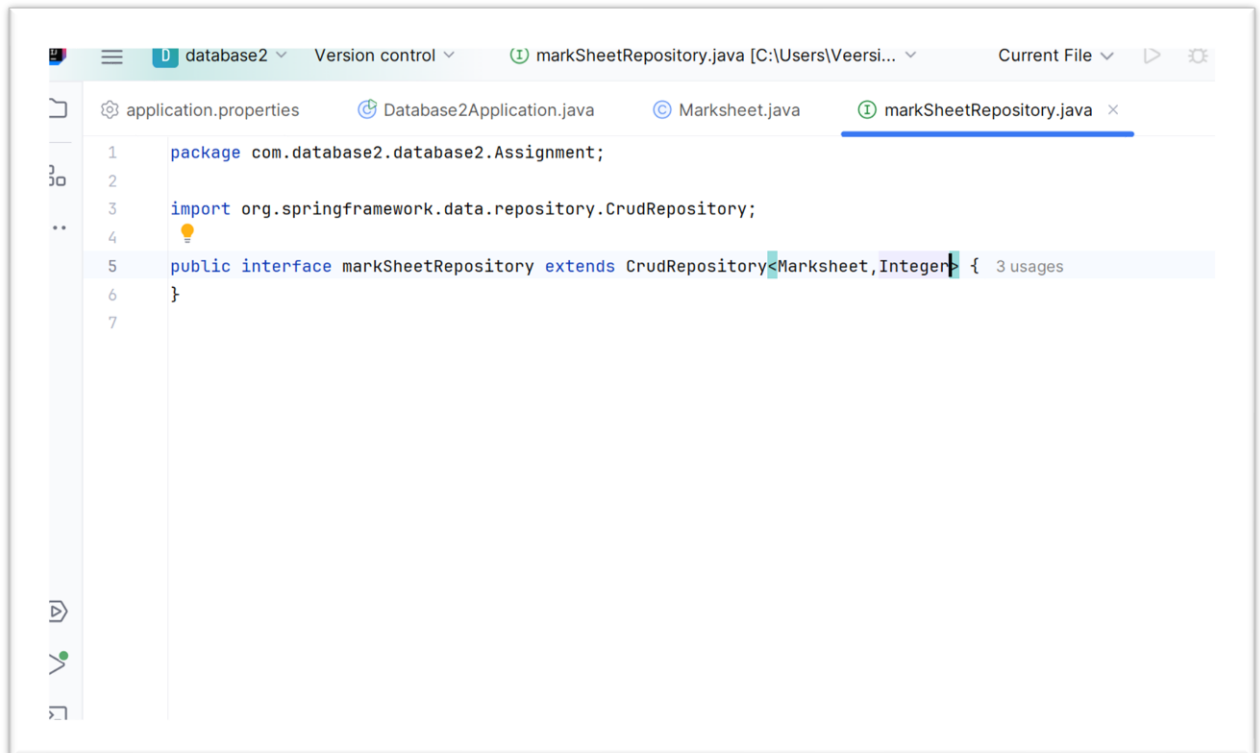
```
5 public class Marksheet {
23     return result;
24 }
25 public void setResult(String result) { 1 usage
26     this.result = result;
27 }
28 public double getMark1() { no usages
29     return mark1;
30 }
31 public void setMark1(double mark1) { 1 usage
32     this.mark1 = mark1;
33 }
34 public double getMark2() { no usages
35     return mark2;
36 }
37 public void setMark2(double mark2) { 1 usage
38     this.mark2 = mark2;
39 }
40 public double getTotal() { no usages
41     return total;
42 }
43 public void setTotal(double total) { 1 usage
44     this.total = total;
45 }
46 public double getAverage() { no usages
```

database2 Version control Marksheet.java [C:\Users\Veersingh Lodhi\... Current File

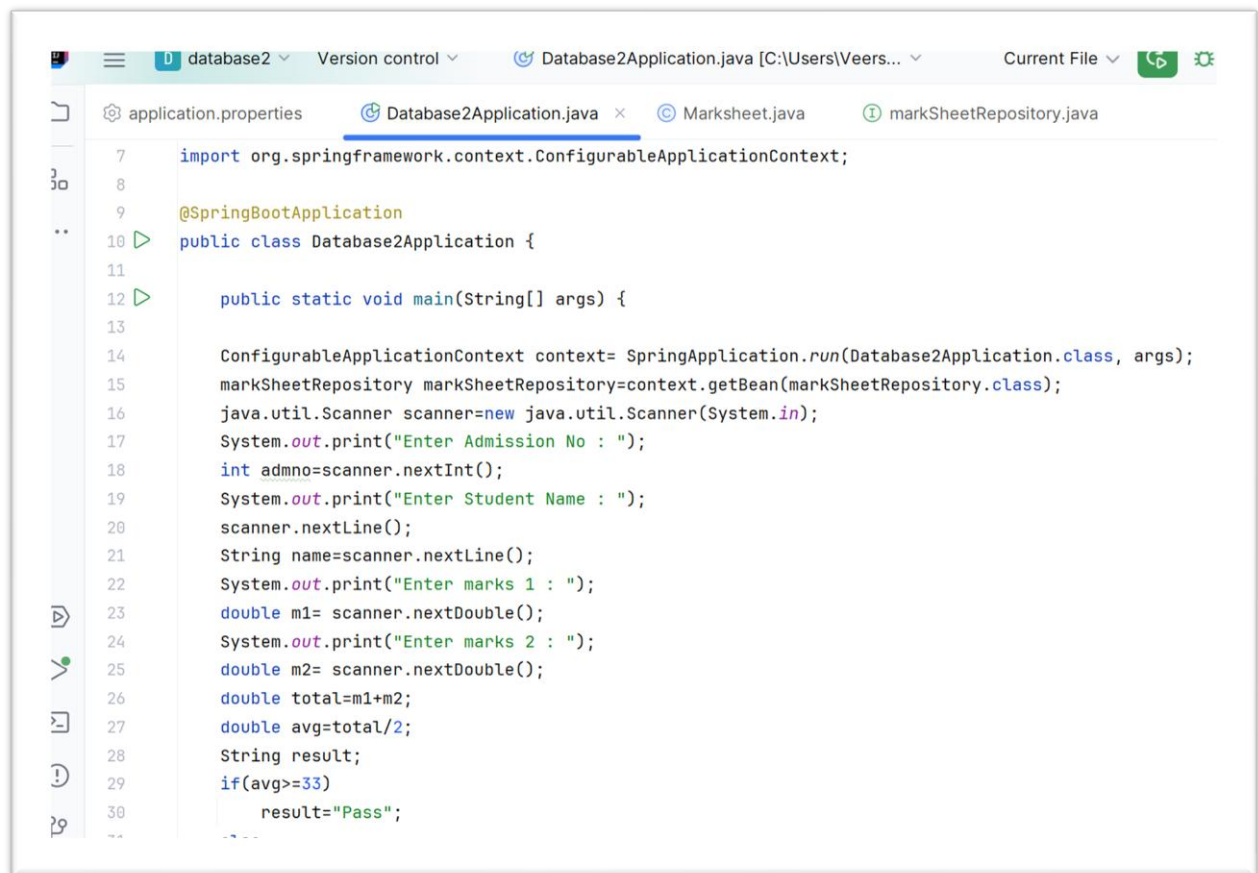
application.properties Database2Application.java Marksheet.java x markSheetRepository.java

```
5 public class Marksheet {
35     return mark2;
36 }
37 public void setMark2(double mark2) { 1 usage
38     this.mark2 = mark2;
39 }
40 public double getTotal() { no usages
41     return total;
42 }
43 public void setTotal(double total) { 1 usage
44     this.total = total;
45 }
46 public double getAverage() { no usages
47     return average;
48 }
49 public void setAverage(double average) { 1 usage
50     this.average = average;
51 }
52 public Marksheet() { 1 usage
53 }
54 }
55
```

Creating the 'markSheetRepository' Interface for Database Operations :

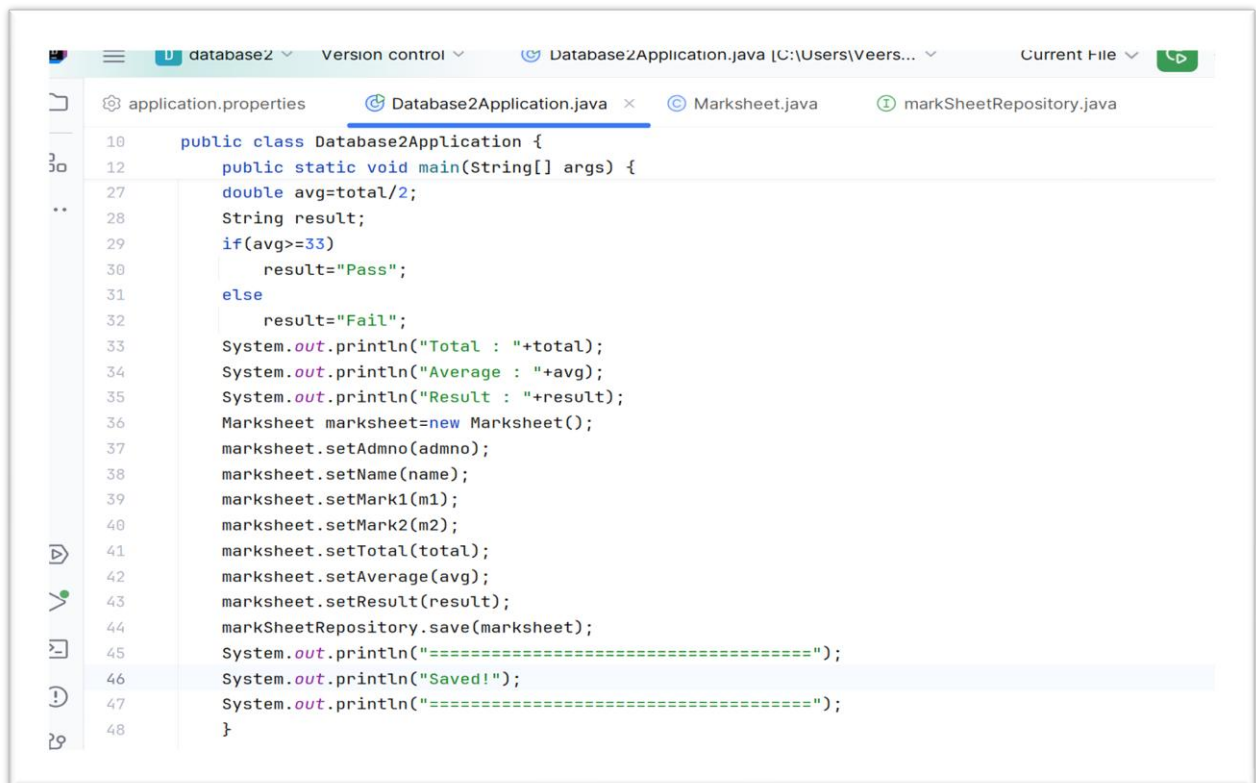


Main Method in Spring Boot Application: Entry Point



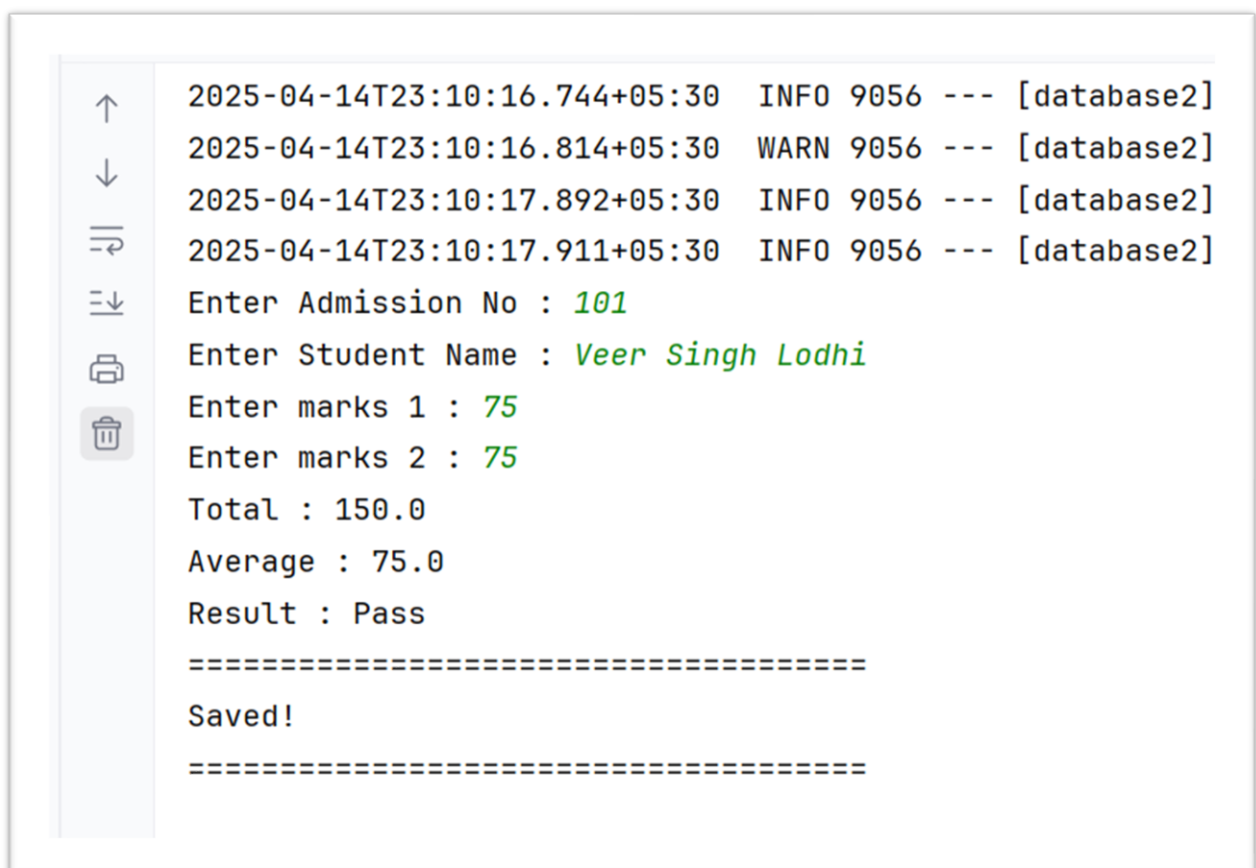
The screenshot shows an IDE window with the file `Database2Application.java` open. The code defines a `@SpringBootApplication` class `Database2Application` with a `main` method. The `main` method initializes a `ConfigurableApplicationContext`, retrieves a `markSheetRepository` bean, and uses a `Scanner` to take user input for admission number, student name, and two marks. It then calculates the average and determines if the student passed based on a threshold of 33.

```
7 import org.springframework.context.ConfigurableApplicationContext;
8
9 @SpringBootApplication
10 public class Database2Application {
11
12     public static void main(String[] args) {
13
14         ConfigurableApplicationContext context= SpringApplication.run(Database2Application.class, args);
15         markSheetRepository markSheetRepository=context.getBean(markSheetRepository.class);
16         java.util.Scanner scanner=new java.util.Scanner(System.in);
17         System.out.print("Enter Admission No : ");
18         int admno=scanner.nextInt();
19         System.out.print("Enter Student Name : ");
20         scanner.nextLine();
21         String name=scanner.nextLine();
22         System.out.print("Enter marks 1 : ");
23         double m1= scanner.nextDouble();
24         System.out.print("Enter marks 2 : ");
25         double m2= scanner.nextDouble();
26         double total=m1+m2;
27         double avg=total/2;
28         String result;
29         if(avg>=33)
30             result="Pass";
31     }
```



```
10 public class Database2Application {
12     public static void main(String[] args) {
27         double avg=total/2;
28         String result;
29         if(avg>=33)
30             result="Pass";
31         else
32             result="Fail";
33         System.out.println("Total : "+total);
34         System.out.println("Average : "+avg);
35         System.out.println("Result : "+result);
36         Marksheet marksheet=new Marksheet();
37         marksheet.setAdmno(admno);
38         marksheet.setName(name);
39         marksheet.setMark1(m1);
40         marksheet.setMark2(m2);
41         marksheet.setTotal(total);
42         marksheet.setAverage(avg);
43         marksheet.setResult(result);
44         markSheetRepository.save(marksheet);
45         System.out.println("=====");
46         System.out.println("Saved!");
47         System.out.println("=====");
48     }
```

Student Data Successfully Stored in the Database:



```
2025-04-14T23:10:16.744+05:30 INFO 9056 --- [database2]
2025-04-14T23:10:16.814+05:30 WARN 9056 --- [database2]
2025-04-14T23:10:17.892+05:30 INFO 9056 --- [database2]
2025-04-14T23:10:17.911+05:30 INFO 9056 --- [database2]
Enter Admission No : 101
Enter Student Name : Veer Singh Lodhi
Enter marks 1 : 75
Enter marks 2 : 75
Total : 150.0
Average : 75.0
Result : Pass
=====
Saved!
=====
```

```

↑ 2025-04-14T23:13:42.935+05:30 INFO 22872 --- [database2] [      main] j
↓ 2025-04-14T23:13:43.006+05:30 WARN 22872 --- [database2] [      main] J
↩ 2025-04-14T23:13:44.026+05:30 INFO 22872 --- [database2] [      main] o
⇓ 2025-04-14T23:13:44.043+05:30 INFO 22872 --- [database2] [      main] c
Enter Admission No : 102
Enter Student Name : XYZ
Enter marks 1 : 32
Enter marks 2 : 33
Total : 65.0
Average : 32.5
Result : Fail
=====
Saved!
=====

```

```

postgres=# select *from marksheet;
 admno |      name      | mark1 | mark2 | total | average | result
-----+-----+-----+-----+-----+-----+-----
   101 | Veer Singh Lodhi |    75 |    75 |   150 |       75 | Pass
(1 row)

postgres=# select *from marksheet;
 admno |      name      | mark1 | mark2 | total | average | result
-----+-----+-----+-----+-----+-----+-----
   101 | Veer Singh Lodhi |    75 |    75 |   150 |       75 | Pass
   102 | XYZ              |    32 |    33 |    65 |    32.5 | Fail
(2 rows)

postgres=# █

```