

```
import java.sql.*;
```

```
import java.util.Scanner;
```

```
public class Exam {
```

```
    private Connection conn;
```

```
    private int userId;
```

```
    public Exam(Connection conn, int userId){
```

```
        this.conn = conn;
```

```
        this.userId = userId;
```

```
    }
```

```
    public void takeExam(){
```

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

```
        try{
```

```
            Statement stmt = conn.createStatement();
```

```
            ResultSet exams = stmt.executeQuery("SELECT * FROM exams");
```

```
            System.out.println("Available Exams:");
```

```
            while(exams.next()){
```

```
                System.out.println(exams.getInt("id") + ". " + exams.getString("exam_name"));
```

```
            }
```

```
            System.out.print("Select Exam ID: ");
```

```
            int examId = sc.nextInt();
```

```
sc.nextLine();
```

```
ResultSet questions = stmt.executeQuery("SELECT * FROM questions WHERE  
exam_id="+examId);
```

```
int score = 0;
```

```
while(questions.next()){
```

```
    System.out.println("\nQ: " + questions.getString("question_text"));
```

```
    System.out.println("1. " + questions.getString("option1"));
```

```
    System.out.println("2. " + questions.getString("option2"));
```

```
    System.out.println("3. " + questions.getString("option3"));
```

```
    System.out.println("4. " + questions.getString("option4"));
```

```
    System.out.print("Answer: ");
```

```
    int answer = sc.nextInt();
```

```
    if(answer == questions.getInt("correct_option")) score++;
```

```
}
```

```
System.out.println("\nExam Finished! Score: "+score);
```

```
PreparedStatement ps = conn.prepareStatement("INSERT INTO  
results(user_id,exam_id,score) VALUES(?,?,?)");
```

```
ps.setInt(1, userId);
```

```
ps.setInt(2, examId);
```

```
ps.setInt(3, score);
```

```
ps.executeUpdate();
```

```
    } catch(Exception e){  
        e.printStackTrace();  
    }  
}  
}
```