

2. You are developing a financial application that needs to handle both whole numbers and decimal values. The application takes user inputs as integers (e.g., representing amounts in cents) and needs to convert them to double for further calculations (e.g., converting cents to dollars).

The application should:

1. Take an integer amount in cents as input.
2. Convert this integer to a double to represent the amount in dollars.
3. Ensure that the conversion is accurate and the output is properly formatted to two decimal places.

Describe how you would implement this, and what the expected output would look like for the following scenarios:

- Input amount: 1250 (cents)
- Input amount: 50 (cents)

Output:

Expected Output:

1. Conversion of Integer to Double:

o Convert the integer amount in cents to double by dividing it by 100.0.

2. Formatting the Output:

o Format the resulting double value to two decimal places for proper representation as dollars.

3. Output for Given Scenarios:

o For an input of 1250 (cents), the output should be: 12.50 (dollars).

o For an input of 50 (cents), the output should be: 0.50 (dollars).

3. In a game, the player's score is calculated as a double value with high precision.

However, for display purposes, you need to show the score as an integer.

Coding:

```
import java.text.*;

import java.util.*;

public class centtodollar{

    public static void main(String[] args){

        Scanner s=new Scanner(System.in);

        System.out.print("enter the amount in cents:");

        int cents= s.nextInt();

        double dollars=cents/100.0;

        DecimalFormat df = new DecimalFormat("0.00");

        String formatteddollars=df.format(dollars);

        System.out.println("Amount in dollars: $" + formatteddollars);

        s.close();

    }

}
```

Output:

```
E:\javacode.java\8-10-2024>javac centtodollar.java

E:\javacode.java\8-10-2024>java centtodollar
enter the amount in cents:1250
Amount in dollars: $12.50

E:\javacode.java\8-10-2024>
```