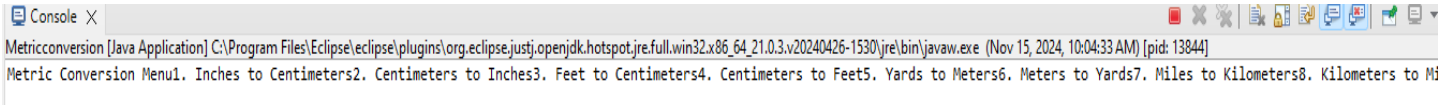
Error log



When the code outputs the menu it goes on too long

```
Metric Conversion Menu
1. Inches to Centimeters
2. Centimeters to Inches
3. Feet to Centimeters
4. Centimeters to Feet
5. Yards to Meters
6. Meters to Yards
7. Miles to Kilometers
8. Kilometers to Miles
Enter your choice:
```

Now the menu is in a neat column

```
System.out.println("Metric Conversion Menu");
System.out.println("1. Inches to Centimeters");
System.out.println("2. Centimeters to Inches");
System.out.println("3. Feet to Centimeters");
System.out.println("4. Centimeters to Feet");
System.out.println("5. Yards to Meters");
System.out.println("6. Meters to Yards");
System.out.println("7. Miles to Kilometers");
System.out.println("8. Kilometers to Miles");
System.out.println("Enter your choice: ");
int choice = in.nextInt();
```

Changed it by using println to make a new line each time

```
1. Inches to Centimeters
2. Centimeters to Inches
3. Feet to Centimeters
4. Centimeters to Feet
5. Yards to Meters
6. Meters to Yards
7. Miles to Kilometers
8. Kilometers to Miles
Enter your choice:
6
Enter meters: 1.12
1.12 meters is equal to 1.2307692307692308 yards
```

The decimals goes on too long

```
1. Inches to Centimeters
2. Centimeters to Inches
3. Feet to Centimeters
4. Centimeters to Feet
5. Yards to Meters
6. Meters to Yards
7. Miles to Kilometers
8. Kilometers to Miles
Enter your choice:
6
Enter meters: 1.12
1.12 meters is equal to 1.23 yards
```

The decimals now aren't that long

```
import java.text.DecimalFormat;
import java.util.Scanner;

public class Metricconversion {
    public static void main(String[] args) {

        // Lets the user input values and makes it so that decimals only go to the hundredths
        Scanner in = new Scanner(System.in);
        DecimalFormat deca = new DecimalFormat("#.##");
```

Import decimal format and puts the decimal format onto the methods while outputting the message to fix the decimals

Example

```
System.out.println(km + " kilometers is equal to " + deca.format(kmtomile(km)) + " miles");
```

```
//switch case for each metric conversion choice
switch (choice) {

//runs case 1 when user picks 1
    case 1:
        //prompt user for input
        System.out.print("Enter inches: ");
        //holds user input
        double inches = in.nextDouble();
        //takes user input and applies inchestocm method to it
        System.out.println(inches + " inches is equal to " + inchestocm(inches) + " centimeters");
        break;

      //runs case 2 when user picks 2
    case 2:
        //prompt user for input
        System.out.print("Enter centimeters: ");
      //holds user input
        double cm = in.nextDouble();
      //takes user input and applies cmtoinches method to it
        System.out.println(cm + " centimeters is equal to " + cmtoinches(cm) + " inches");
        break;

      //runs case 3 when user picks 3
    case 3:
        //prompt user for input
        System.out.print("Enter feet: ");
      //holds user input
        double feet = in.nextDouble();
      //takes user input and applies feettocm method to it
        System.out.println(feet + " feet is equal to " + feettocm(feet) + " centimeters");
        break;

      //runs case 4 when user picks 4
    case 4:
        //prompt user for input
        System.out.print("Enter centimeters: ");
      //holds user input
        cm = in.nextDouble();
      //takes user input and applies cmtofeet method to it
        System.out.println(cm + " centimeters is equal to " + cmtofeet(cm) + " feet");
        break;
```

The code is too long and all cases look like this

```
//switch case for each metric conversion choice
switch (choice) {

//runs case 1 when user picks 1
    case 1:

        //takes user input and applies inchestocm method to it
        System.out.println(num + " inches is equal to " + deca.format(inchestocm(num)) + " centimeters");
        break;

      //runs case 2 when user picks 2
    case 2:
      //takes user input and applies cmtoinches method to it
        System.out.println(num + " centimeters is equal to " + deca.format(cmtoinches(num)) + " inches");
        break;

      //runs case 3 when user picks 3
    case 3:
      //takes user input and applies feettocm method to it
        System.out.println(num + " feet is equal to " + deca.format(feettocm(num)) + " centimeters");
        break;

      //runs case 4 when user picks 4
    case 4:

      //takes user input and applies cmtofeet method to it
        System.out.println(num + " centimeters is equal to " + deca.format(cmtofeet(num)) + " feet");
        break;

      //runs case 5 when user picks 5
    case 5:
      //takes user input and applies yardstom method to it
        System.out.println(num + " yards is equal to " + deca.format(yardstom(num)) + " meters");
        break;

      //runs case 6 when user picks 6
    case 6:
      //takes user input and applies mtoyards  method to it
        System.out.println(num + " meters is equal to " + deca.format(mtoyards(num)) + " yards");
        break;

      //runs case 7 when user picks 7
    case 7:
      //takes user input and applies miletokm method to it
        System.out.println(num + " miles is equal to " + deca.format(miletokm(num)) + " kilometers");
        break;

      //runs case 8 when user picks 8
    case 8:
      //takes user input and applies kmtomile method to it
        System.out.println(num + " kilometers is equal to " + deca.format(kmtomile(num)) + " miles");
        break;
```

shortened all the code by making the user input the number before they pick and then put that number in all switch cases

```
//prompt user for input
System.out.print("Enter a number: ");

//holds user input
double num = in.nextDouble();
```

I changed it by putting this^