

MetricConversion Reflection Logs -

Created a shell of all the methods, which will contain code for each type of metric conversion

```
public class MetricConversion {  
    public static void inchToCm() {  
    }  
    public static void feetToCm() {  
    }  
    public static void yardToM() {  
    }  
    public static void mileToKm() {  
    }  
    public static void cmToInch() {  
    }  
    public static void cmToFeet() {  
    }  
    public static void mToYard() {  
    }  
    public static void kmToMile() {  
    }  
}
```

Decided to do the main() method first since it's simple, although somewhat time consuming

```
// Declaration and initiation, preparing for user input  
Scanner Input = new Scanner(System.in);  
int userChoice;  
  
System.out.println("Choose from one of the below conversions - ");  
System.out.println("");  
System.out.println("1 - Inches to centimetres      5 - Centimetres to Inches ");  
System.out.println("2 - Feet to centimetres      6 - Centimetres to Feet ");  
System.out.println("3 - Yards to metres         7 - Metres to yards ");  
System.out.println("4 - Miles to kilometres     8 - Kilometres to miles ");  
System.out.println("");  
System.out.print("Enter your choice - ");  
userChoice = Input.nextInt();  
  
// Creating a switch statement to execute the associated function  
switch(userChoice) {  
    case 1: inchToCm();  
    case 2: feetToCm();  
    case 3: yardToM();  
    case 4: mileToKm();  
    case 5: cmToInch();  
    case 6: cmToFeet();  
    case 7: mToYard();  
    case 8: kmToMile();  
}
```

Wrote a similar piece of code for each method, with only the variables and numbers being switched, and the final output statement having different words.

```
public static void inchToCm() {  
    // Declaration and initiation  
    Scanner Input = new Scanner(System.in);  
    System.out.print("Input the number of inches - ");  
    int inch = Input.nextInt();  
    double cm = inch * 2.54;  
    System.out.println(inch + " inches equals " + cm + " centimetres");  
}
```