

```
Scanner scanner = new Scanner(System.in);
int choice;
{
    System.out.println("one. Inches to Centimeters");
    System.out.println("two. Feet to Centimeters");
    System.out.println("three. Yards to Meters");
    System.out.println("four. Miles to Kilometers");
    System.out.println("five. Kilometers to Miles");
    System.out.print("Enter your choice (one-five): ");
}
```

a menu with five options for unit conversions, such as converting inches to centimeters or miles to kilometers. It uses a Scanner to ask the user to enter a choice (from 1 to 5), and then it stores that choice in a variable called Choice. Based on the user's input, a Switch statement checks which option was selected and prints a message confirming the selection. The program is designed to handle user input and show a specific message based on the conversion the user wants to perform. Finally, it closes the Scanner to avoid any resource issues.

case 1:

```
System.out.print("Please enter inches: ");
double inches = scanner.nextDouble();
double centimeters = inchesToCentimeters(inches);
System.out.printf("%.2f inches is %.2f centimeters.%n", inches, centimeters);
break;
```

case 2:

```
System.out.print("Please enter feet: ");
double feet = scanner.nextDouble();
centimeters = feetToCentimeters(feet);
System.out.printf("%.2f feet is %.2f centimeters.%n", feet, centimeters);
break;
```

case 3:

```
System.out.print("Please enter yards: ");
double yards = scanner.nextDouble();
double meters = yardsToMeters(yards);
System.out.printf("%.2f yards is %.2f meters.%n", yards, meters);
break;
```

case 4:

```
System.out.print("Please enter miles: ");
double miles = scanner.nextDouble();
double kilometers = milesToKilometers(miles);
System.out.printf("%.2f miles is %.2f kilometers.%n", miles, kilometers);
break;
```

case 5:

```
System.out.print("Please enter kilometers: ");
kilometers = scanner.nextDouble();
miles = kilometersToMiles(kilometers);
System.out.printf("%.2f kilometers is %.2f miles.%n", kilometers, miles);
break;
```

handles five unit conversion choices (inches to centimeters, feet to centimeters, yards to meters, miles to kilometers, and kilometers to miles). For each choice, the program prompts the user to enter a value (like inches or miles), performs the corresponding conversion using specific methods (e.g., `Inches To Centimeters` or `Feet To Centimeters` ), and then prints the result in a formatted message. Each conversion case is handled in a Switch statement, where the program reads the input, calculates the conversion, and displays the result. After each conversion, the program moves to the next part of the code with the Break statement.

```

        default:

            System.out.println("That is not a choice. Please try again.");
        }
        System.out.println();
    } while (choice != 6);
}

public static double inchesToCentimeters(double inches) {
    return inches * 2.54;
}
public static double feetToCentimeters(double feet) {
    return feet * 30.48;
}
public static double yardsToMeters(double yards) {
    return yards * 0.9144;
}
public static double milesToKilometers(double miles) {
    return miles * 1.60934;
}
public static double kilometersToMiles(double kilometers) {
    return kilometers / 1.60934;
}
}

```

a menu for unit conversions and keeps asking the user for a choice until they enter 6 to exit. If the user enters an invalid choice, it shows an error message. Each conversion (like inches to centimeters or miles to kilometers) is handled by separate methods that perform the calculations and return the result. The program keeps running and lets the user try again until they choose to stop.