

Untitled-1

```
1 import java.util.Scanner;
2
3 public class CurrencyConverter {
4     private static final double USD_TO_EUR = 0.93; // Example exchange rate
5     private static final double EUR_TO_USD = 1.08; // Example exchange rate
6     private static final double USD_TO_JPY = 139.45; // Example exchange rate
7     private static final double JPY_TO_USD = 0.0072; // Example exchange rate
8     private static final double EUR_TO_JPY = 149.15; // Example exchange rate
9     private static final double JPY_TO_EUR = 0.0067; // Example exchange rate
10
11     public static void main(String[] args) {
12         Scanner scanner = new Scanner(System.in);
13         String sourceCurrency, targetCurrency;
14         double amount;
15
16         System.out.println("Currency Converter");
17         System.out.print("Enter source currency (USD, EUR, JPY): ");
18         sourceCurrency = scanner.nextLine().toUpperCase();
19         System.out.print("Enter target currency (USD, EUR, JPY): ");
20         targetCurrency = scanner.nextLine().toUpperCase();
21         System.out.print("Enter amount to convert: ");
22         amount = scanner.nextDouble();
23
24         double convertedAmount = convertCurrency(sourceCurrency, targetCurrency, amount);
25         if (convertedAmount >= 0) {
26             System.out.printf("%.2f %s is equivalent to %.2f %s\n", amount, sourceCurrency,
convertedAmount, targetCurrency);
27         } else {
28             System.out.println("Invalid currency codes entered.");
29         }
30
31         scanner.close();
32     }
33
34     private static double convertCurrency(String sourceCurrency, String targetCurrency, double
amount) {
35         if (sourceCurrency.equals(targetCurrency)) {
36             return amount; // No conversion needed
37         }
38
39         switch (sourceCurrency) {
40             case "USD":
41                 switch (targetCurrency) {
42                     case "EUR": return amount * USD_TO_EUR;
43                     case "JPY": return amount * USD_TO_JPY;
44                     default: return -1; // Invalid target currency
45                 }
46             case "EUR":
```

```
47         switch (targetCurrency) {
48             case "USD": return amount * EUR_TO_USD;
49             case "JPY": return amount * EUR_TO_JPY;
50             default: return -1; // Invalid target currency
51         }
52     case "JPY":
53         switch (targetCurrency) {
54             case "USD": return amount * JPY_TO_USD;
55             case "EUR": return amount * JPY_TO_EUR;
56             default: return -1; // Invalid target currency
57         }
58     default:
59         return -1; // Invalid source currency
60     }
61 }
62 }
63 }
```