

CURRENCY CONVERTER

```
package interniiii;
import java.util.Scanner;
public class Currencyconverter {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Welcome to Currency Converter!");

        while (true) {
            System.out.println("Select the base currency:");
            System.out.println("1. USD (United States Dollar)");
            System.out.println("2. EUR (Euro)");
            System.out.println("3. INR (Indian Rupee)");
            System.out.println("4. YEN (Japanese Yen)");
            System.out.println("5. CAD (Canadian Dollar)");
            System.out.println("6. YUAN (Chinese Yuan)");
            System.out.println("0. Exit");

            int baseCurrencyChoice = getChoice(scanner);

            if (baseCurrencyChoice == 0) {
                break;
            }

            int targetCurrencyChoice = getTargetCurrencyChoice(scanner);

            double amount = getAmount(scanner);

            double convertedAmount = convertCurrency(baseCurrencyChoice,
targetCurrencyChoice, amount);

            System.out.println("Converted amount: " + convertedAmount);

            System.out.print("Do you want to convert another amount? (yes/no): ");
            String response = scanner.next().toLowerCase();

            if (!response.equals("yes")) {
                break;
            }
        }
    }
}
```

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}
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```
System.out.println("Thank you for using Currency Converter!");  
scanner.close();  
}
```

```
private static int getChoice(Scanner scanner) {  
    int choice;  
    while (true) {  
        System.out.print("Enter your choice: ");  
        if (scanner.hasNextInt()) {  
            choice = scanner.nextInt();  
            if (choice >= 0 && choice <= 6) {  
                break;  
            }  
        } else {  
            scanner.next(); // Consume invalid input  
        }  
        System.out.println("Invalid choice. Please select a valid option.");  
    }  
    return choice;  
}
```

```
private static int getTargetCurrencyChoice(Scanner scanner) {  
    int targetChoice;  
    while (true) {  
        System.out.println("Select the target currency:");  
        System.out.println("1. USD (United States Dollar)");  
        System.out.println("2. EUR (Euro)");  
        System.out.println("3. INR (Indian Rupee)");  
        System.out.println("4. YEN (Japanese Yen)");  
        System.out.println("5. CAD (Canadian Dollar)");  
        System.out.println("6. YUAN (Chinese Yuan)");  
    }  
}
```

```
System.out.print("Enter your choice: ");  
if (scanner.hasNextInt()) {  
    targetChoice = scanner.nextInt();  
    if (targetChoice >= 1 && targetChoice <= 6) {  
        break;  
    }  
} else {  
    scanner.next(); // Consume invalid input  
}  
System.out.println("Invalid choice. Please select a valid target  
currency.");  
}  
return targetChoice;  
}
```

```
private static double getAmount(Scanner scanner) {
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```

double amount;
while (true) {
    System.out.print("Enter the amount to convert: ");
    if (scanner.hasNextDouble()) {
        amount = scanner.nextDouble();
        if (amount >= 0) {
            break;
        }
    } else {
        scanner.next(); // Consume invalid input
    }
    System.out.println("Invalid amount. Please enter a non-negative number.");
}
return amount;
}

```

```

private static double convertCurrency(int baseCurrencyChoice, int
targetCurrencyChoice, double amount) {
    double conversionRate = 0.0;

```

```

    switch (baseCurrencyChoice) {
        case 1: // USD (United States Dollar)
            switch (targetCurrencyChoice) {
                case 1: // USD to USD
                    conversionRate = 1.0;
                    break;
                case 2: // USD to EUR
                    conversionRate = 0.95;
                    break;
                case 3: // USD to INR
                    conversionRate = 83.18;
                    break;
                case 4: // USD to YEN
                    conversionRate = 149.86;
                    break;
                case 5: // USD to CAD
                    conversionRate = 1.37;
                    break;
                case 6: // USD to YUAN
                    conversionRate = 7.32;
                    break;
            }
            break;
        case 2: // EUR (Euro)
            switch (targetCurrencyChoice) {
                case 1://EUR to USD
                    conversionRate = 1.06;
                    break;
                case 2://EUR to INR
                    conversionRate = 87.96;
                    break;
                case 3://EUR to YEN
                    conversionRate = 158.47;
                    break;
            }

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case 4://EUR to CAD
    conversionRate = 1.45;
    break;
case 5://EUR to YUAN
    conversionRate = 7.74;
    break;
}
break;
case 3: // INR (Indian Rupee)
switch (targetCurrencyChoice) {
case 1://INR to USD
    conversionRate = 0.012;
    break;
case 2: //INR to EUR
    conversionRate = 0.011;
    break;
case 3://INR to YEN
    conversionRate = 1.80;
    break;
case 4://INR to CAD
    conversionRate = 0.016;
    break;
case 5://INR to YAUN
    conversionRate = 0.088;
    break;
}
break;
case 4: // YEN (Japanese Yen)
switch (targetCurrencyChoice) {
case 1://YEN to USD
    conversionRate = 0.0067;
    break;
case 2://YEN to EUR
    conversionRate = 0.0063;
    break;
case 3://YEN to INR
    conversionRate = 0.56;
    break;
case 4://YEN to CAD
    conversionRate = 0.0092;
    break;
case 5://YEN to YAUN
    conversionRate = 0.048;
    break;
}
break;
case 5: // CAD (Canadian Dollar)
switch (targetCurrencyChoice) {
case 1://CAD to USD
    conversionRate = 0.73;
    break;
case 2://CAD to EUR
    conversionRate = 0.69;
    break;
case 3://CAD to INR
    conversionRate = 60.66;
    break;

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```
case 4://CAD to YEN
    conversionRate = 109.30;
    break;
case 5://CAD to YAUN
    conversionRate = 5.34;
    break;
}
break;
case 6: // YUAN (Chinese Yuan)
switch (targetCurrencyChoice) {
case 1://YAUN to USD
    conversionRate = 0.14;
    break;
case 2://YAUN to EUR
    conversionRate = 0.13;
    break;
case 3://YAUN to INR
    conversionRate = 11.37;
    break;
case 4://YAUN to YEN
    conversionRate = 20.48;
    break;
case 5://YAUN to CAD
    conversionRate = 0.19;
    break;
}
break;
}

return amount * conversionRate;
}
}
```

```
CodSoftInternship - interniiii/src/interniiii/Currencyconverter.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

<terminated> Currencyconverter [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (20-Oct
Welcome to Currency Converter!
Select the base currency:
1. USD (United States Dollar)
2. EUR (Euro)
3. INR (Indian Rupee)
4. YEN (Japanese Yen)
5. CAD (Canadian Dollar)
6. YUAN (Chinese Yuan)
0. Exit
Enter your choice: 1
Select the target currency:
1. USD (United States Dollar)
2. EUR (Euro)
3. INR (Indian Rupee)
4. YEN (Japanese Yen)
5. CAD (Canadian Dollar)
6. YUAN (Chinese Yuan)
Enter your choice: 3
Enter the amount to convert: 1
Converted amount: 83.18
Do you want to convert another amount? (yes/no): yes
Select the base currency:
1. USD (United States Dollar)
2. EUR (Euro)
3. INR (Indian Rupee)
4. YEN (Japanese Yen)
5. CAD (Canadian Dollar)
6. YUAN (Chinese Yuan)
0. Exit
Enter your choice: 3
Select the target currency:
1. USD (United States Dollar)
2. EUR (Euro)
3. INR (Indian Rupee)
4. YEN (Japanese Yen)
5. CAD (Canadian Dollar)
6. YUAN (Chinese Yuan)
```