import java.util.HashMap;

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import java.util.Scanner;

public class CurrencyConverter

{

public static void main(String[] args)

{

Scanner scanner = new Scanner(System.in);

boolean continueConversion = true;

while (continueConversion)

{

Map<String, Double> exchangeRates = new HashMap<>();

exchangeRates.put("USD", 1.0);

exchangeRates.put("EUR", 0.85);

exchangeRates.put("GBP", 0.73);

exchangeRates.put("JPY", 110.50);

exchangeRates.put("AUD", 1.30);

exchangeRates.put("CAD", 1.25);

System.out.println("Available currencies:");

for (String currency : exchangeRates.keySet())

{

System.out.println(currency);

}

System.out.print("Enter your base currency: ");

String baseCurrency = scanner.nextLine().toUpperCase();

while (!exchangeRates.containsKey(baseCurrency))

{

System.out.println("Invalid currency. Please enter a valid currency:");

baseCurrency = scanner.nextLine().toUpperCase();

}

System.out.print("Enter amount in " + baseCurrency + ": ");

double amount = scanner.nextDouble();

System.out.print("Enter target currency: ");

String targetCurrency = scanner.next().toUpperCase();

while (!exchangeRates.containsKey(targetCurrency))

{

System.out.println("Invalid currency. Please enter a valid currency:");

targetCurrency = scanner.next().toUpperCase();

}

double convertedAmount = amount \* exchangeRates.get(targetCurrency);

System.out.println(amount + " " + baseCurrency + " is equal to " + convertedAmount + " " + targetCurrency);

System.out.print("Do you want to convert another currency? (yes/no): ");

String choice = scanner.next().toLowerCase();

continueConversion = choice.equals("yes");

scanner.nextLine();

}

System.out.println("Thank you for using the currency converter!");

scanner.close();

}

}

OUTPUT:

Available currencies:

AUD

JPY

EUR

GBP

USD

CAD

Enter your base currency: eur

Enter amount in EUR: 300

Enter target currency: jpy

300.0 EUR is equal to 33150.0 JPY

Do you want to convert another currency? (yes/no): no

Thank you for using the currency converter!

=== Code Execution Successful ===