LAHORE
GARRISON
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Programming
Fundamentals

Final Project

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Submit to
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converter

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INTRODUCTION

CURRENCY CONVERTER

The Currency Converter C++ program is a simple application that allows users to convert an amount in US Dollars (USD) to equivalent amounts in different currencies, including Euros (EUR), British Pounds (GBP), and Japanese Yen (JPY). The program utilizes predefined conversion rates to perform the currency conversions.

converter

dryrun

animation

dryrun

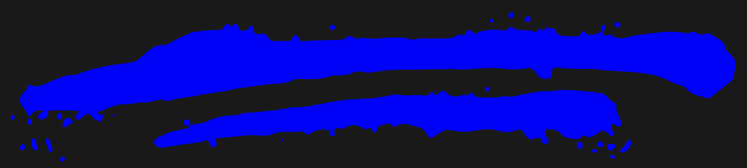
Editor

```cpp
#include <iostream>
#include <iomanip>

using namespace std;
int main()

{
  double amountUSD;
  cout << "Enter amount in USD: ";
  cin >> amountUSD;

  const double USD_TO_EUR = 0.82;
  const double USD_TO_GBP = 0.72;
  const double USD_TO_JPY = 110.21;
  const double USD_TO_INR = 81.9959;
  const double USD_TO_PKR = 286.443;
```



These lines include the necessary header files for input/output operations (**iostream**) and formatting (**iomanip**). This line is a "using" directive that allows us to use names from the **std namespace** without explicitly specifying it. This is the starting point of the program. The **main** function is where the execution begins

Variable Declarations and User Input
These lines define constants representing the conversion rates from **USD** (US Dollars) to other currencies (**EUR, GBP, JPY**). These lines declare a variable **amountUSD** to store the user input, prompt the user to enter an amount in USD, and read the input from the user.

```
    double amountEUR = amountUSD * USD_TO_EUR;
    double amountGBP = amountUSD * USD_TO_GBP;
    double amountJPY = amountUSD * USD_TO_JPY;
    double amountINR = amountUSD * USD_TO_INR;
    double amountPKR = amountUSD * USD_TO_PKR;

    cout << fixed << setprecision(2);
    cout << "Amount\t\tCurrency" << endl;
    cout << "-------------------------" << endl;
    cout << amountUSD << "\t\tUSD" << endl;
    cout << amountEUR << "\t\tEUR" << endl;
    cout << amountGBP << "\t\tGBP" << endl;
    cout << amountJPY << "\t\tJPY" << endl;
    cout << amountINR << "\t\tINR" << endl;
    cout << amountPKR << "\t\tPKR" << endl;

    return 0;
}
```

OUTPUT

```
Enter amount in USD: 100
Amount          Currency
---------------------------------
100.00          USD
91.58           EUR
78.65           GBP
14370.50        JPY
8199.59         INR
28644.30        PKR
```

In this segment, the program sets the output precision to two decimal places using **fixed** and **setprecision(2)** manipulators. Then, it displays the conversion results using **cout.** The amounts in USD, EUR, GBP, JPY, INR, and PKR are printed to the console.

This segment defines constant conversion rates from USD to other currencies. The rates are stored in variables with self-explanatory names. The subsequent calculations use these rates to convert the **amountUSD** value into amounts in EUR, GBP, JPY, INR, and PKR

THANKS FOR LISTENING