

# ***conversion calculator***

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**SEC:D2**

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```
#include <stdio.h>
```

```
int main() {
```

```
    char category;
```

```
    int tempChoice;
```

```
    int currencyChoice;
```

```
    int massChoice;
```

```
    int userInputF;
```

```
    int userInputC;
```

```
    int userInputINRtoUSD;
```

```
    int userInputINRtoJPY;
```

```
    int userInputINRtoEURO;
```

```
    int userInputKg;
```

```
    int userInputGram;
```

```
    int fahrenheitToCelcius;
```

```
    int celciusToFahrenheit;
```

```
    float INRtoUSD ;
```

```
    float INRtoJPY;
```

```
    float INRtoEURO;
```

```
    float KgToPounds;
```

```
    float gramsToPounds;
```

```
printf("Welcome to Unit Converter! \n");
printf("Here is a list of conversation to choose from: \n");
printf("Temperature(T),Currency(C),Mass(M) \n");
printf("Please enter the letter you want to convert.\n");
scanf("%c",&category);

if(category == 'T'){
    printf("Welcome to Temperature Converter! \n");
    printf("Here is a list of conversations to choose from: \n");
    printf("Enter 1 for Fahrenheit to Celsius. \n");
    printf("Enter 2 for Celsius to Fahrenheit. \n");
    scanf("%d",&tempChoice);
    if(tempChoice == 1){
        printf("Please enter the Fahrenheit degree: \n");
        scanf("%d",&userinputF);
        fahrenheitToCelcius = ((userinputF-32) * (5.0/9.0));
        printf("Celcius: %d",fahrenheitToCelcius);
    }
    else if(tempChoice == 2){
        printf("Please enter the Celcius degree: \n");
        scanf("%d",&userinputC);
        celciusToFahrenheit = ((9.0/5.0)*userinputC + 32);
        printf("Fahrenheit: %d",celciusToFahrenheit);
    }
    else
        printf("Please enter the correct choice. \n");
}
```

```
}
```

```
else if(category == 'C') {
```

```
    printf("Welcome to Currency Converter! \n");
```

```
    printf("Here is a list of conversations to choose from: \n");
```

```
    printf("Enter 1 for INR to USD. \n");
```

```
    printf("Enter 2 for INR to JPY. \n");
```

```
    printf("Enter 3 for INR to EURO. \n");
```

```
    scanf("%d",&currencyChoice);
```

```
    if(currencyChoice == 1){
```

```
        printf("Please enter the INR amount: \n");
```

```
        scanf("%d",&userinputINRtoUSD);
```

```
        INRtoUSD = userinputINRtoUSD * 0.013;
```

```
        printf("USD: %.2f",INRtoUSD); // %.2f = rounds the float to only 2 decimal  
places;
```

```
    }
```

```
    else if(currencyChoice == 2){
```

```
        printf("Please enter the INR amount: \n");
```

```
        scanf("%d",&userinputINRtoJPY);
```

```
        INRtoJPY = userinputINRtoJPY * 1.73;
```

```
        printf("JPY: %.2f",INRtoJPY);
```

```
    }
```

```
    else if(currencyChoice == 3) {
```

```
        printf("Please enter the USD amount: \n");
```

```
        scanf("%d",&userinputINRtoEURO);
```

```
        INRtoEURO = userinputINRtoEURO * 0.012;
```

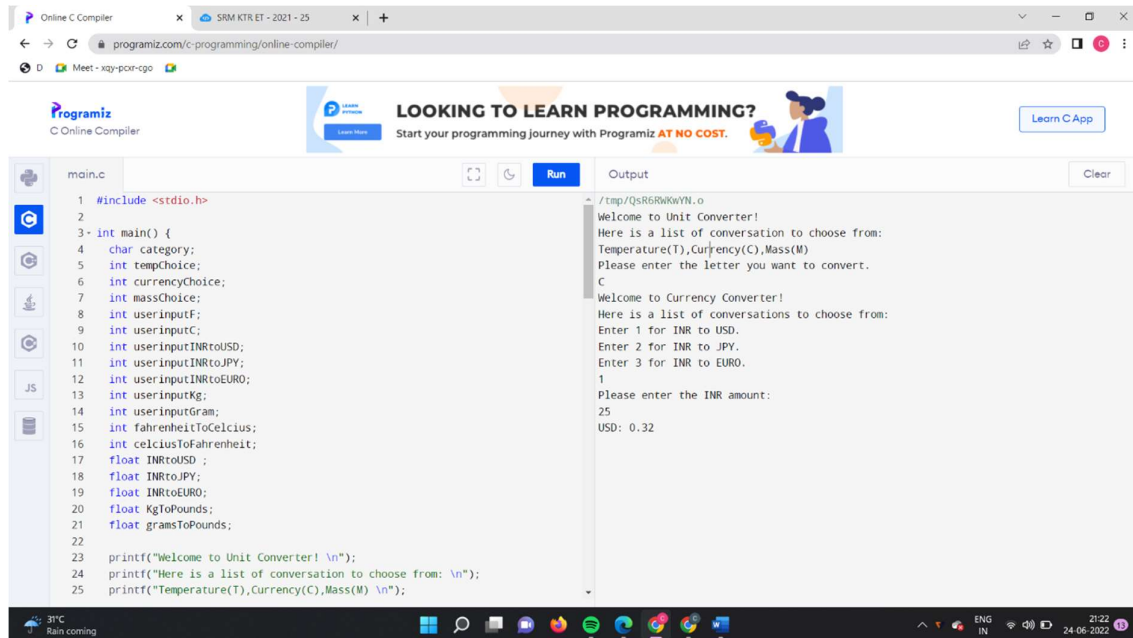
```
        printf("EURO: %.2f",INRtoEURO);
```

```
}  
else  
    printf("Please enter correct choice. \n");  
}  
else if(category == 'M'){  
    printf("Welcome to Mass Converter! \n");  
    printf("Here is a list of conversations to choose from: \n");  
    printf("Enter 1 for Kg to pounds. \n");  
    printf("Enter 2 for gram to pounds. \n");  
    scanf("%d",&massChoice);  
    if(massChoice == 1){  
        printf("Please enter the Kg amount: \n");  
        scanf("%d",&userinputKg);  
        KgToPounds = userinputKg * 2.205;  
        printf("Pounds: %.2f",KgToPounds);  
    }  
    else if(massChoice == 2) {  
        printf("Please enter the gram amount: \n");  
        scanf("%d",&userinputGram);  
        gramsToPounds = userinputGram * 0.00220462;  
        printf("Pounds: %.2f",gramsToPounds);  
    }  
    else  
        printf("Please enter the correct choice. \n");  
}  
return 0;
```

}

## Sample input and output

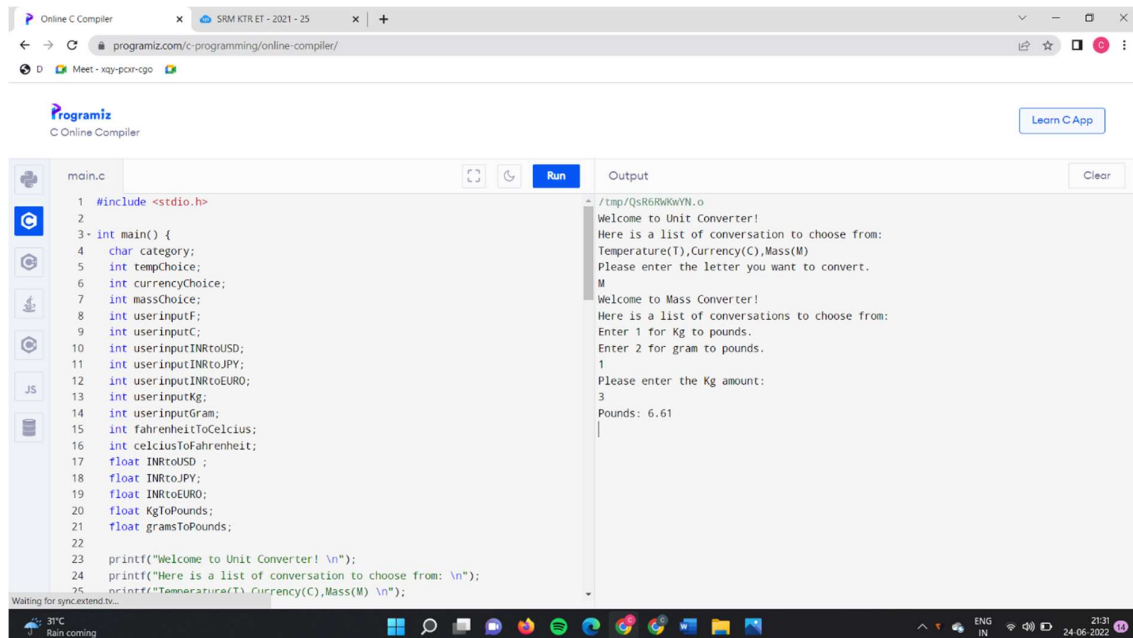
### Case -1



The screenshot shows the Programiz Online C Compiler interface. The code editor on the left contains a C program for a unit converter. The output window on the right shows the program's execution, which prompts the user to choose a conversion type (Temperature, Currency, or Mass) and then the specific units to convert. The user has entered 'C' for Currency, and the program has prompted for the amount in INR, which was entered as 25. The output shows the result as 0.32 USD.

```
main.c
1 #include <stdio.h>
2
3 int main() {
4     char category;
5     int tempChoice;
6     int currencyChoice;
7     int massChoice;
8     int userInputF;
9     int userInputC;
10    int userInputINRtoUSD;
11    int userInputINRtoJPY;
12    int userInputINRtoEUR;
13    int userInputKg;
14    int userInputGram;
15    int fahrenheitToCelsius;
16    int celsiusToFahrenheit;
17    float INRtoUSD;
18    float INRtoJPY;
19    float INRtoEUR;
20    float KgToPounds;
21    float gramsToPounds;
22
23    printf("Welcome to Unit Converter! \n");
24    printf("Here is a list of conversation to choose from: \n");
25    printf("Temperature(T),Currency(C),Mass(M) \n");
26
27    // ... (rest of the code is truncated in the image) ...
28
29    // Output:
30    /tmp/QsR6R0w0YN.o
31    Welcome to Unit Converter!
32    Here is a list of conversation to choose from:
33    Temperature(T),Currency(C),Mass(M)
34    Please enter the letter you want to convert.
35    C
36    Welcome to Currency Converter!
37    Here is a list of conversations to choose from:
38    Enter 1 for INR to USD.
39    Enter 2 for INR to JPY.
40    Enter 3 for INR to EURO.
41    1
42    Please enter the INR amount:
43    25
44    USD: 0.32
```

### Case-2



The screenshot shows the Programiz Online C Compiler interface. The code editor on the left contains the same C program as in Case 1. The output window on the right shows the program's execution, which prompts the user to choose a conversion type (Temperature, Currency, or Mass) and then the specific units to convert. The user has entered 'M' for Mass, and the program has prompted for the amount in Kg, which was entered as 3. The output shows the result as 6.61 Pounds.

```
main.c
1 #include <stdio.h>
2
3 int main() {
4     char category;
5     int tempChoice;
6     int currencyChoice;
7     int massChoice;
8     int userInputF;
9     int userInputC;
10    int userInputINRtoUSD;
11    int userInputINRtoJPY;
12    int userInputINRtoEUR;
13    int userInputKg;
14    int userInputGram;
15    int fahrenheitToCelsius;
16    int celsiusToFahrenheit;
17    float INRtoUSD;
18    float INRtoJPY;
19    float INRtoEUR;
20    float KgToPounds;
21    float gramsToPounds;
22
23    printf("Welcome to Unit Converter! \n");
24    printf("Here is a list of conversation to choose from: \n");
25    printf("Temperature(T),Currency(C),Mass(M) \n");
26
27    // ... (rest of the code is truncated in the image) ...
28
29    // Output:
30    /tmp/QsR6R0w0YN.o
31    Welcome to Unit Converter!
32    Here is a list of conversation to choose from:
33    Temperature(T),Currency(C),Mass(M)
34    Please enter the letter you want to convert.
35    M
36    Welcome to Mass Converter!
37    Here is a list of conversations to choose from:
38    Enter 1 for Kg to pounds.
39    Enter 2 for gram to pounds.
40    1
41    Please enter the Kg amount:
42    3
43    Pounds: 6.61
```

## Case-3

Online C Compiler

SRM KTR ET - 2021 - 25

normal body temperature - Google

programiz.com/c-programming/online-compiler/

Meet - xyz-pqr-ghi

Programiz C Online Compiler

IBM Tap into the 68% of data that goes unanalysed

Learn How

Learn C App

main.c

```
1 #include <stdio.h>
2
3 int main() {
4     char category;
5     int tempChoice;
6     int currencyChoice;
7     int massChoice;
8     int userInputF;
9     int userInputC;
10    int userInputINRtoUSD;
11    int userInputINRtoJPY;
12    int userInputINRtoEUR;
13    int userInputKg;
14    int userInputGram;
15    int fahrenheitToCelsius;
16    int celsiusToFahrenheit;
17    float INRtoUSD;
18    float INRtoJPY;
19    float INRtoEUR;
20    float KgToPounds;
21    float gramsToPounds;
22
23    printf("Welcome to Unit Converter! \n");
24    printf("Here is a list of conversation to choose from: \n");
25    printf("Temperature(T),Currency(C),Mass(M) \n");
```

Run

Output

Clear

```
/tmp/QsR6RdKwYN.o
Welcome to Unit Converter!
Here is a list of conversation to choose from:
Temperature(T),Currency(C),Mass(M)
Please enter the letter you want to convert.
T
Welcome to Temperature Converter!
Here is a list of conversations to choose from:
Enter 1 for Fahrenheit to Celsius.
Enter 2 for Celsius to Fahrenheit.
2
Please enter the Celcius degree:
38
Fahrenheit: 100
```

31°C Rain coming

21:53 24-06-2022