

# **Teamwork-convertor**

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## **1 Teamwork – Converter**

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**1.1.1 10 October 2022**

<https://github.com/HongWang324/bluebiscuit.git> (<https://github.com/HongWang324/bluebiscuit.git>)

In [1]:

```
while True:
    print("""*****
1-1 - temperature-fahrenheit to celsius
1-2 - temperature-celsius to fahrenheit
2-1 - length-miles to km
2-2 - length-km to miles
3-1 - weight-pound to kilograms
3-2 - weight-kilograms to pound
4 - pressure
5 - Exit.
*****""")
    choice = input("What would you like to do?")
    if choice == "1-1":
        fahrenheit = float(input("Enter temperature in fahrenheit: "))
        celsius = (fahrenheit - 32) * 5/9

        print('%.2f Fahrenheit is: %.2f Celsius' %(fahrenheit, celsius))

    elif choice == "1-2":
        celsius = float(input("Enter temperature in celsius: "))
        fahrenheit = (celsius * 9/5) + 32

        print('%.2f Celsius is: %.2f Fahrenheit' %(celsius, fahrenheit))

    elif choice == "2-1":
        miles = float(input("Enter the value in miles: "))
        conversion_factor = 1.60934

        kilometers = miles * conversion_factor

        print('%.4f miles = %.4f kilometers' %(miles, kilometers))

    elif choice == "2-2":

        # Taking kilometers input from the user
        kilometers = float(input("Enter value in kilometers: "))

        # conversion factor
        conv_fac = 0.621371

        # calculate miles
        miles = kilometers * conv_fac

        print('%.2f kilometers is equal to %.2f miles' %(kilometers,miles))

    elif choice == "3-1":

        # Write a program that asks the user to enter a weight in pounds.
        # The program should convert it to kilograms using the formula.

        pounds = float(input('Enter weight in Pounds(Lbs) to Convert into, →Kilograms:'))

        # 1 Pound = 0.453592 Kilograms
        kilo_grams = pounds * 0.453592

        print(pounds, ' Pounds (Lbs) are equal to', kilo_grams, 'Kilograms (Kgs)')
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elif choice == "3-2":

    # Write a program that asks the user to enter a weight in kilograms.
    # The program should convert it to pounds using the formula.

    kilo_grams = float(input('Enter weight in Kg to Convert into pounds:'))

    # 1 kg = 2.2046 pounds

    pounds = kilo_grams * 2.2046

    print(kilo_grams, ' Kilograms =', pounds, ' Pounds')

elif choice == "4":

    kpa = float(input("Input pressure in in kilopascals> "))
    psi = kpa / 6.89475729

    mmhg = kpa * 760 / 101.325

    atm = kpa / 101.325

    print("The pressure in pounds per square inch: %.2f psi" % (psi))

    print("The pressure in millimeter of mercury: %.2f mmHg" % (mmhg))

    print("Atmosphere pressure: %.2f atm." % (atm))

elif choice == "5":
    exit
    break
else:
    print("Error, invalid choice")

```

```

*****
1-1 - temperature-fahrenheit to celsius
1-2 - temperature-celsius to fahrenheit
2-1 - length-miles to km
2-2 - length-km to miles
3-1 - weight-pound to kilograms
3-2 - weight-kilograms to pound
4 - pressure
5 - Exit.
*****
What would you like to do?1-1
Enter temperature in fahrenheit: 10
10.00 Fahrenheit is: -12.22 Celsius
*****
1-1 - temperature-fahrenheit to celsius
1-2 - temperature-celsius to fahrenheit
2-1 - length-miles to km
2-2 - length-km to miles
3-1 - weight-pound to kilograms
3-2 - weight-kilograms to pound
4 - pressure
5 - Exit.
*****

```

What would you like to do?1-2  
Enter temperature in celsius: 10  
10.00 Celsius is: 50.00 Fahrenheit

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- 1-1 - temperature-fahrenheit to celsius
- 1-2 - temperature-celsius to fahrenheit
- 2-1 - length-miles to km
- 2-2 - length-km to miles
- 3-1 - weight-pound to kilograms
- 3-2 - weight-kilograms to pound
- 4 - pressure
- 5 - Exit.

\*\*\*\*\*

What would you like to do?2-1  
Enter the value in miles: 10  
10.0000 miles = 16.0934 kilometers

\*\*\*\*\*

- 1-1 - temperature-fahrenheit to celsius
- 1-2 - temperature-celsius to fahrenheit
- 2-1 - length-miles to km
- 2-2 - length-km to miles
- 3-1 - weight-pound to kilograms
- 3-2 - weight-kilograms to pound
- 4 - pressure
- 5 - Exit.

\*\*\*\*\*

What would you like to do?2-2  
Enter value in kilometers: 10  
10.00 kilometers is equal to 6.21 miles

\*\*\*\*\*

- 1-1 - temperature-fahrenheit to celsius
- 1-2 - temperature-celsius to fahrenheit
- 2-1 - length-miles to km
- 2-2 - length-km to miles
- 3-1 - weight-pound to kilograms
- 3-2 - weight-kilograms to pound
- 4 - pressure
- 5 - Exit.

\*\*\*\*\*

What would you like to do?3-1  
Enter weight in Pounds(Lbs) to Convert into, →Kilograms:10  
10.0 Pounds (Lbs) are equal to 4.53592 Kilograms (Kgs)

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- 1-1 - temperature-fahrenheit to celsius
- 1-2 - temperature-celsius to fahrenheit
- 2-1 - length-miles to km
- 2-2 - length-km to miles
- 3-1 - weight-pound to kilograms
- 3-2 - weight-kilograms to pound
- 4 - pressure
- 5 - Exit.

\*\*\*\*\*

What would you like to do?3-2  
Enter weight in Kg to Convert into pounds:10  
10.0 Kilograms = 22.046 Pounds

\*\*\*\*\*

- 1-1 - temperature-fahrenheit to celsius
- 1-2 - temperature-celsius to fahrenheit
- 2-1 - length-miles to km
- 2-2 - length-km to miles
- 3-1 - weight-pound to kilograms

3-2 - weight-kilogramms to pound  
4 - pressure  
5 - Exit.

\*\*\*\*\*

What would you like to do?4

Input pressure in in kilopascals> 10

The pressure in pounds per square inch: 1.45 psi

The pressure in millimeter of mercury: 75.01 mmHg

Atmosphere pressure: 0.10 atm.

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1-1 - temperature-fahrenheit to celsius

1-2 - temperature-celsius to fahrenheit

2-1 - length-miles to km

2-2 - length-km to miles

3-1 - weight-pound to kilogramms

3-2 - weight-kilogramms to pound

4 - pressure

5 - Exit.

\*\*\*\*\*

What would you like to do?5

In [ ]: