

Q1. Write a Python program to convert kilometers to miles?

```
kilometers = float(input("Enter the distance in kilometers: "))  
miles = kilometers * 0.621371  
print("Distance in miles:", miles)
```

Q2. Write a Python program to convert Celsius to Fahrenheit?

```
celsius = float(input("Enter the temperature in Celsius: "))  
fahrenheit = (celsius * 9/5) + 32  
print("Temperature in Fahrenheit:", fahrenheit)
```

Q3. Write a Python program to display calendar?

```
import calendar  
year = 2021  
month = 12  
print(calendar.month(year, month))  
year = 2022  
print(calendar.calendar(year))
```

Q4. Write a Python program to solve quadratic equation?

```
import math  
print("ax^2 + bx^1 + c = 0")  
print("Enter the coefficients a, b, and constant c")  
a = float(input("Enter the coefficient a: "))  
b = float(input("Enter the coefficient b: "))  
c = float(input("Enter the constant c: "))  
d = (b ** 2) - (4 * a * c)
```

```

if d > 0:
    # Two distinct real roots
    root1 = (-b + math.sqrt(d)) / (2 * a)
    root2 = (-b - math.sqrt(d)) / (2 * a)
    print("The equation has two distinct real roots:")
    print("Root 1 =", root1)
    print("Root 2 =", root2)
elif d == 0:
    root = -b / (2 * a)
    print("The equation has one real root (repeated):")
    print("Root =", root)
else:
    real_part = -b / (2 * a)
    imaginary_part = math.sqrt(abs(d)) / (2 * a)
    print("The equation has complex roots:")
    print("Root 1 =", real_part, "+", imaginary_part, "i")
    print("Root 2 =", real_part, "-", imaginary_part, "i")

```

Q5. Write a Python program to swap two variables without temp variable?

```

var1 = 6
var2 = 4
print("Before swap:")
print("var1 =", var1)
print("var2 =", var2)
var1 = var1 + var2
var2 = var1 - var2
var1 = var1 - var2
print("\nAfter swap:")
print("var1 =", var1)
print("var2 =", var2)

```