Day 3 of Python Assignment Answers -

7. Write a Python program to display calendar?

```
import calendar

# Ask the user for input
year = int(input("Enter the year: "))
month = int(input("Enter the month: "))

# Display the calendar
print(calendar.month(year, month))
```

This Python program imports the built-in calendar module to display a calendar of a specific year and month. It prompts the user to enter the year and month for which they want to display the calendar. The entered values are used to call the calendar.month function, which returns a string containing the calendar for the specified year and month. The program then prints the returned string, which displays the calendar to the user.



8. Write a Python program to solve quadratic equation?

```
import cmath
a = float(input("Enter the coefficient of x^2: "))
b = float(input("Enter the coefficient of x: "))
c = float(input("Enter the constant term: "))
# Calculate the discriminant
discriminant = (b**2) - (4*a*c)
# Find the roots of the equation
root1 = (-b - cmath.sqrt(discriminant)) / (2*a)
root2 = (-b + cmath.sqrt(discriminant)) / (2*a)
# Print the roots
print(f"The roots of the equation are: {root1} and {root2}")
```

This program prompts the user to enter the coefficients of a quadratic equation in the form $ax^2 + bx + c = 0$, where a, b, and c are constants. It then calculates the discriminant of the equation, which is $b^2 - 4ac$, and uses it to find the roots of the equation using the quadratic formula: $(-b \pm sqrt(b^2 - 4ac)) / 2a$. Finally, it prints the roots of the equation. If the discriminant is negative, the program will print the roots as complex numbers.



9. Write a Python program to swap two variables with temp variable?

```
# take input from the user
x = input('Enter value of x: ')
y = input('Enter value of y: ')
# print the original values of x and y
print(f'Before swapping: x = {x}, y = {y}')
\# swap the values of x and y using a temporary variable
temp = x
x = y
y = temp
# print the swapped values of x and y
print(f'After swapping: x = {x}, y = {y}')
```

In this program, we first take input from the user for the variables x and y. Then, we print the original values of x and y. Next, we swap the values of x and y using a temporary variable temp. Finally, we print the swapped values of x and y.

