

Python Programming Assignment-2

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

```
# 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('%0.2f kilometers is equal to %0.2f miles' %(kilometers,miles))
```

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

```
celsius_1 = float(input("Temperature value in degree Celsius: " ))

Fahrenheit_1 = (celsius_1 * 1.8) + 32

print('The %.2f degree Celsius is equal to: %.2f Fahrenheit' %(celsius_1, Fahrenheit_1))
```

3. Write a Python program to display calendar?

```
import calendar

yy = 2021 # year
mm = 10   # month
print(calendar.month(yy, mm))
```

4. Write a Python program to solve quadratic equation?

```
import math
# function for finding roots
def equationroots( a, b, c):

    # calculating discriminant using formula
    dis = b * b - 4 * a * c
    sqrt_val = math.sqrt(abs(dis))

    # checking condition for discriminant
    if dis > 0:
        print(" real and different roots ")
        print((-b + sqrt_val)/(2 * a))
        print((-b - sqrt_val)/(2 * a))

    elif dis == 0:
        print(" real and same roots")
        print(-b / (2 * a))

    # when discriminant is less than 0
    else:
```

```

        print("Complex Roots")
        print(- b / (2 * a), " + i", sqrt_val)
        print(- b / (2 * a), " - i", sqrt_val)

# Driver Program
a = 1
b = 10
c = -24

# If a is 0, then incorrect equation
if a == 0:
    print("Input correct quadratic equation")

else:
    equationroots(a, b, c)

```

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

```

x = 5
y = 7

print ("Before swapping: ")
print("Value of x : ", x, " and y : ", y)

# code to swap 'x' and 'y'
x, y = y, x

print ("After swapping: ")
print("Value of x : ", x, " and y : ", y)

```