

1. Write a Python program to convert kilometres 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?

```
# Python Program to convert temperature in celsius to fahrenheit

# change this value for a different result
celsius = 37.5

# calculate fahrenheit
fahrenheit = (celsius * 1.8) + 32
print('%0.1f degree Celsius is equal to %0.1f degree Fahrenheit' %(celsius,fahrenheit))
```

3. Write a Python program to display calendar?

```
# Program to display calendar of the given month and year

# importing calendar module
import calendar

yy = 2014 # year
mm = 11 # month

# To take month and year input from the user
# yy = int(input("Enter year: "))
# mm = int(input("Enter month: "))

# display the calendar
print(calendar.month(yy, mm))
```

4. Write a Python program to solve quadratic equation?

```
# Solve the quadratic equation ax**2 + bx + c = 0

# import complex math module
import cmath

a = 1
b = 5
```

```
c = 6
```

```
# calculate the discriminant
```

```
d = (b**2) - (4*a*c)
```

```
# find two solutions
```

```
sol1 = (-b-cmath.sqrt(d))/(2*a)
```

```
sol2 = (-b+cmath.sqrt(d))/(2*a)
```

```
print('The solution are {0} and {1}'.format(sol1,sol2))
```

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)
```