

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

```
In [5]: 1 km=float(input('enter distance in km '))
        2 miles=0.62137*km
        3 print('distance in miles :',miles)
```

enter distance in km 56
distance in miles : 34.79672

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

```
In [8]: 1 celc=float(input('enter temp in celcius '))
        2 fah=((celc*9)/5)+32
        3 print('temp in fahrenheit : ',fah)
```

enter temp in celcius 5
temp in fahrenheit : 41.0

3. Write a Python program to display calendar?

```
In [13]: 1 import calendar
        2 y=2023
        3 print(calendar.calendar(y))
```

2023																											
January								February								March											
Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su					
						1				1	2	3	4	5				1	2	3	4	5					
2	3	4	5	6	7	8		6	7	8	9	10	11	12		6	7	8	9	10	11	12					
9	10	11	12	13	14	15		13	14	15	16	17	18	19		13	14	15	16	17	18	19					
16	17	18	19	20	21	22		20	21	22	23	24	25	26		20	21	22	23	24	25	26					
23	24	25	26	27	28	29		27	28							27	28	29	30	31							
30	31																										
April								May								June											
Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su					
						1	2			1	2	3	4	5	6	7				1	2	3	4				
3	4	5	6	7	8	9		8	9	10	11	12	13	14		5	6	7	8	9	10	11					
10	11	12	13	14	15	16		15	16	17	18	19	20	21		12	13	14	15	16	17	18					
17	18	19	20	21	22	23		22	23	24	25	26	27	28		19	20	21	22	23	24	25					
24	25	26	27	28	29	30		29	30	31						26	27	28	29	30							
July								August								September											
Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su					
						1	2			1	2	3	4	5	6					1	2	3					
3	4	5	6	7	8	9		7	8	9	10	11	12	13		4	5	6	7	8	9	10					
10	11	12	13	14	15	16		14	15	16	17	18	19	20		11	12	13	14	15	16	17					
17	18	19	20	21	22	23		21	22	23	24	25	26	27		18	19	20	21	22	23	24					
24	25	26	27	28	29	30		28	29	30	31					25	26	27	28	29	30						
31																											
October								November								December											
Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su					
						1					1	2	3	4	5					1	2	3					
2	3	4	5	6	7	8		6	7	8	9	10	11	12		4	5	6	7	8	9	10					
9	10	11	12	13	14	15		13	14	15	16	17	18	19		11	12	13	14	15	16	17					
16	17	18	19	20	21	22		20	21	22	23	24	25	26		18	19	20	21	22	23	24					
23	24	25	26	27	28	29		27	28	29	30					25	26	27	28	29	30	31					
30	31																										

4. Write a Python program to solve quadratic equation?

In [39]:

```
1 import math as m
2 def sqr_root(a,b,c):      #ax^2+bx+c where a , b and c are coefficient
3     disc=(b*b)-(4*a*c)
4     sqr=m.sqrt(abs(disc))
5     if disc>0:
6         print('root is real and different')
7         root1=(-b+sqr)/(2*a)
8         root2=(-b-sqr)/(2*a)
9         return root1,root2
10
11     elif disc==0:
12         print('root is real and equal')
13         root2=root1=-b/(2*a)
14         return root1,root2
15     else:
16         print(f'root1:{-b/(2*a)} +i{sqr/(2*a)} and root2:{-b/(2*a)}-i{sqr/(2*a)}')
17 a=float(input('coeff of x^2: '))
18 b=float(input('coeff of x: '))
19 c=float(input('constant: '))
20 if a==0:
21     print('invalid equation')
22 else:
23     print(sqr_root(a,b,c))
24
25
```

coeff of x^2: 2
coeff of x: 2
constant: 1
root1:-0.5 +i0.5 and root2:-0.5-i0.5
None

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

In [40]:

```
1 a=10
2 b=6
3 a=a+b
4 b=a-b
5 a=a-b
6 print(f'a is {a},b is {b}')
```

a is 6,b is 10

In []:

```
1
```