1.ramesh's basic salary is input through the keyboard. his dearness allowance is 40% basic salary, and house rent allowance is 20% of basic salary. write a programto calculate his gross salary.

```
In [7]: basic=eval(input("enter the basic salary:"))
    dearness=(40/100)*basic
    house=(20/100)*basic
    gross=basic+house+dearness
    print("ramesh gross salary is {}".format(gross))
```

enter the basic salary:200 ramesh gross salary is 320.0

2.the distance between two cities (in km).is input through the keyboard.write a program to convert and print this distance in meter, feet, inches, and centimeters.

```
In [17]: distance=eval(input('enter the distance between two cities in kilometers:')
    distance_meters=distance*1000
    distance_feet=distance*3280.4
    distance_inches=distance*39370.1
    distance_centimeters=distance*100000
    print('distance in meters is: {}'.format(distance_meters))
    print('distance in feet is: {}'.format(distance_feet))
    print('distance in inches is: {}'.format(distance_inches))
    print('distance in centimeters is: {}'.format(distance_centimeters))
```

enter the distance between two cities in kilometers:10 distance in meters is: 10000 distance in feet is: 32804.0 distance in inches is: 393701.0 distance in centimeters is: 1000000

3.if the marks obtained by a student in five different subjects are input through the keyboard, find out th aggregate marks and percentage marks obtained by the student assume that the maximum marks that can be obtained by a student in each subject is 100.

```
In [20]: subject_1=eval(input('enter the maths marks:'))
    subject_2=eval(input('enter the science marks:'))
    subject_3=eval(input('enter the social marks:'))
    subject_4=eval(input('enter the english marks:'))
    subject_5=eval(input('enter the telugu marks'))
    aggregate=subject_1+subject_2+subject_3+subject_4+subject_5
    percentage=aggregate/500*100
    print('the aggregate marks obtained by a student is {} '.format(aggregate))
    print('the percentage obtained by student is {}'.format(percentage))
```

```
enter the maths marks:90
enter the science marks:90
enter the social marks:90
enter the english marks:90
enter the telugu marks:90
the aggregate marks obtained by a student is 450
the percentage obtained by student is 90.0
```

4.temperature of a city in fahrenheat degrees in input through the keybboard.write a program to convert this temperature in to centigrade degrees.

```
In [23]: fahrenheat_temp=eval(input('enter the temperature in fahrenheat:'))
    centigrade_temp=((fahrenheat_temp-32)*5)/9
    print('temperature in centigrade degrees is {}'.format(round(centigrade_temp))
```

enter the temperature in fahrenheat:120 temperature in centigrade degrees is 48.89

5.the length&breadth of a rectangle and radius of a circle are input through the keyboard.write a program to calculate the area and perimeter of the rectangle, and the area and circumference of the circle.

```
import math
length=eval(input('enter the length of the rectangle:'))
breadth=eval(input('enter the breadth of the rectangle:'))
area=length*breadth
perimeter=2*(length+breadth)
print('area of rectangle is {}'.format(area))
print('perimeter of rectangle is {}'.format(perimeter))
r=eval(input('enter the radius of the circle:'))
c_area=math.pi*r*r
circum=2*math.pi*r
print('area of circle is {}'.format(round(c_area,2)))
print('circumference of circle is {}'.format(round(circum,2)))
```

enter the length of the rectangle:10 enter the breadth of the rectangle:20 area of rectangle is 200 perimeter of rectangle is 60 enter the radius of the circle:5 area of circle is 78.54 circumference of circle is 31.42

6.two numbers are input through the keyboard in two locations c and d .write a program to interchange the contents of c and d.

```
In [25]: c=eval(input('enter c number:'))
    d=eval(input('enter d number:'))
    temp=c
    c=d
    print('value of c is {}'.format(c))
    print('value of d is {}'.format(d))

    enter c number:20
    enter d number:16
    value of c is 16
    value of d is 16
```

7.if a five-digit number is input through the keyboard, write a program to reverse the number.

```
In [26]: num=eval(input('enter the five digot-number'))
    temp=num
    rev_num=0
    while num!=0:
        digit=num%10
        rev_num=rev_num*10+digit
        num=num//10
    print('reverse of number is {}'.format(rev_num))
```

enter the five digot-number65432 reverse of number is 23456

8.if a four-digit number is input through the keyword, write a program to obtain the sum of the first and last digit of this number.

```
In [28]: num=eval(input('enter the four digit number'))
    sum_res=0
    ct=0
    while num!=0:
        if ct==0:
            last=num%10
            ct=ct+1
        rem=num%10
            num=int(num/10)
            sum_res=last+rem
    print('the sum of first digit and last digit of the given number is:',sum_r
```

enter the four digit number6365 the sum of first digit and last digit of the given number is: 11

9.in a town, the percentage of men is 52.the percentage of total literacy is 48.if total percentage of literate men is 35 oof the total population, write a program to find the total no.of illiterate men and women if the population of the town is 80,000

```
In [33]: no_of_men=(52/100)*80000
    total_literate_men=(35/100)*80000
    total_illeterate_men=(no_of_men)-(total_literate_men)
    print('total no.of illeterate men are {}'.format(total_illeterate_men))
    total_women=80000-no_of_men
    print('total women population is {}'.format(total_women))
```

total no.of illeterate men are 13600.0 total women population is 38400.0

10.a cashier has currency notes of denominations 10,50 and 100.if the amount to be withdrawn is input through the keyboard in hundreads ,find the total no.of currency notes of each denomination the cashier will have to the withdrawer

```
In [36]: amount=eval(input('enter the amount to be withdrawn:'))
    number_of_100=amount//100
    amount=amount-(number_of_100*100)
    number_of_50=amount//50
    amount=amount-(number_of_50*50)
    number_of_10=amount//10
    print('the number of 100 denoinations are {}'.format(number_of_100))
    print('the number of 50 denoinations are {}'.format(number_of_50))
    print('the number of 10 denoinations are {}'.format(number_of_10))

    enter the amount to be withdrawn:260
    the number of 100 denoinations are 2
    the number of 50 denoinations are 1
    the number of 10 denoinations are 1
```