

In []: ASSIGNMENT-4_Without arguments

In []: *# 1.wap to ask the user enter three numbers and calculate average?*

```
In [1]: def shruthi():
        num1=eval(input("enter num1:"))
        num2=eval(input("enter num2:"))
        num3=eval(input("enter num3:"))
        sum=num1+num2+num2
        avg=sum/3
        avg1=round(avg,2)
        print(f"average of three numbers is={avg1}")
        shruthi()
```

average of three numbers is=52.33

In []: *# 2.find the area of circle*

```
In [3]: import math
        def shruthi():
            r=eval(input("enter radius:"))
            area=math.pi*r*r
            area1=round(area,2)
            print(area1)
            shruthi()
```

50.27

In []: *# 3.wap to ask user bill amount
ask the user howmuch tipyou want pay in percentage
#calculate totalbill*

```
In [4]: def shruthi():
        bill=eval(input("enter bill:"))
        tip=eval(input("entertip:"))
        total=(bill+(bill*tip/100))
        print(total)
        shruthi()
```

550.0

In []: *# 4.wap to ask the user to enter base and height and calculate the area of triangle*

```
In [6]: def shruthi():
        b=eval(input("enter base:"))
        h=eval(input("enter height:"))
        area=(1/2)*b*h
        area1=round(area,3)
        print(area1)
        shruthi()
```

6.367

In []: *# 5.wap to ask the user to enter length and breadth and calculate the area of rectang*

```
In [7]: def shruthi():
        l=eval(input("enter l"))
        b=eval(input("enter b:"))
        area=l*b
        area1=round(area,2)
        print(area1)
        shruthi()
```

7.34

```
In [ ]: # 6.find even number or odd number
```

```
In [8]: def shruthi():
        num1=eval(input("enter num:"))
        if num1%2==0:
            print(f"{num1} is even")
        else:
            print(f"{num1} is odd")
        shruthi()
```

45 is odd

```
In [ ]: # 7.Write a programme ask the user enter the distance
        # if distance greater than 25km
        # then enter the charge
        # print the total cost
        # otherwise
        # print free ride
```

```
In [10]: def distance():
        distance=eval(input("enter the distance in kms:"))
        if distance>25:
            charge=eval(input("enter charge:"))
            total_cost=charge*distance
            print(f"the total cost is {total_cost}")
        else:
            print("freeride")
        distance()
```

the total cost is 135

```
In [12]: # 8.Write a programme ask the user enter the distance
        # if distance greater than 25km
        # then enter the charge
        # print the total cost
        # otherwise
        # print free ride
        # implement by using random between(1,100)
```

```
In [13]: import random
        def distance():
            distance=random.randint(1,100)
            if distance>25:
                charge=eval(input("enter charge:"))
                total_cost=charge*distance
                print(f"the total cost is {total_cost}")
```

```

else:
    print("freeride")
distance()

```

freeride

```

In [ ]: # 9. Write a programme ask the user enter the distance
        # cutoff distance enter 25
        # if distance greater than 25km
        # print("good news your charge is applicable for only remaining of 25")
        # chargeable distance=distance-cutoff
        # enter the charge
        # print the total cost
        # otherwise
        # print freeride

```

```

In [11]: def distance1():
        distance=eval(input("enter the distance in kms:"))
        cutoff_distance=25
        if distance>cutoff_distance:
            print("good news your charge is applicable for only remaining of 25")
            chargeable_distance=distance-cutoff_distance
            charge=eval(input("enter charge:"))
            total_cost=charge*chargeable_distance
            print(f"the total cost is {total_cost}")
        else:
            print("freeride")
        distance1()

```

good news your charge is applicable for only remaining of 25
the total cost is 200

```

In [ ]: #10. Write a programme ask the user to enter course name
        # ask user to enter the institute
        # if the course equal to data science and institute equal to naresh it
        # then you are good
        # otherwise
        # you are bad

```

```

In [21]: def course():
        course_name=input("enter course name:")
        institute_name=input("enter institute name:")
        if course_name=='data science' and institute_name=='naresh it':
            print("You are good")
        else:
            print("You are bad")
        course()

```

You are good

```

In [ ]: #11. Write a programme ask the user to enter random number between 1 to 10, treat this
        # ask the user to enter another number from keyboard as number2
        # if number1 equals to number2
        # print you won
        # otherwise
        # print you lost

```

```
In [22]: def randomm():
          number1=random.randint(1,10)
          number2=eval(input("enter number2:"))
          if number1==number2:
              print("You won")
          else:
              print("You lost")
          randomm()
```

You lost

```
In [ ]: #12. Write a programme ask the user enter number
        # if number equal to 1 then print one
        # if number equal to 2 then print two
        # if number equal to 3 then print three
        # otherwise print enter a valid number
```

```
In [23]: def match():
          number=eval(input("enter a number:"))
          if number==1:
              print("one")
          elif number==2:
              print("two")
          elif number==3:
              print("three")
          else:
              print("enter a valid number")
          match()
```

two

```
In [ ]: #13. Write a programme ask the user to enter
        # if the number is greater than zero,print positive
        # if the number is less than zero,print negative
        # otherwise print zero
```

```
In [24]: def posneg():
          number=eval(input("enter a number:"))
          if number>0:
              print("positive")
          elif number<0:
              print("negative")
          else:
              print("zero")
          posneg()
```

negative

```
In [ ]: #14. Write a programme that ask the user to enter percentage marks 0 to 100
        # if percentage greater than 90,print A grade
        # if percentage between 75 to 90,print B grade
        # if percentage between 50 to 75,print C grade
        # if percentage between 35 to 50,print D grade
        # if percentage less than 35,print fail
```

```
In [25]: def marks():
percentage=eval(input("enter percentage of marks:"))
if percentage>=90:
    print("A grade")
elif percentage>=75:
    print("B grade")
elif percentage>=50:
    print("C grade")
elif percentage>=35:
    print("D grade")
else:
    print("Fail")
marks()
```

C grade

```
In [ ]: #15. Write a programme that asks user to enter age
# if the age greater than 100 print you are Lucky
# if age greater than 75 print old age
# if age between 50 to 75,print senior citizen
# if age between 30 to50,print middle age
# if age between 15to 30,print young age
#if age less than 15,print kid
```

```
In [27]: def age():
age=eval(input("enter age of person:"))
if age>=100:
    print("You are lucky")
elif age>=75:
    print("old age")
elif age>=50:
    print("senior citizen")
elif age>=30:
    print("middle age")
elif age>=15:
    print("young age")
else:
    print("kid")
age()
```

senior citizen

```
In [ ]:
```