1. n=[3,5,6,7,9]

square=lambda n:n\*n

print(list(map(square,n)))

1. def iseven(a):

return a%2==0

n=[35,6,7,9]

even=list(filter(iseven,n))

print(even)

1. from functools import reduce

def add(a,b):

return a+b

n=[2,5,6,79]

total=reduce(add,n)

print(total)

1. n=[3,5,6,7,9]

square=lambda n:n\*n

print(list(map(square,n)))

1. n=[3,5,6,7,9] even=lambda n:n%2==0

print(list(filter(even,n))

1. from functools import reduce

n=[2,5,6,7,9]

total=reduce(lambda x,y:x+y,n)

print(total)

1. student={"name":"swe","age":18,"course" :"Aiml"}

print(student)

student2=dict(name="swe",age=18,course ="aiml")

print(student2)

1. student={"name":"swe","age":18 "course":"Aiml"} print(student) student2=dict(name="rebecca",age=18 ,course="aiml") print(student2) print(student["name"] print(student.get("name")) print(student.get("gender"))
2. student={"name":"swe","age":18 "course":"Aiml"} print(student) student2=dict(name="rebecca",age=18 course="aiml") student["age"]=25 print(student) student["grade"]="aa" print(student)
3. stu2=dict(name="swe ,age=18,course ="aiml" for i,j in stu2.items(): print(f"{i}:{j}")
4. s=input("enter a sentence:") n={} w=s.split() for i in w: if i in n: n[i]+=1 else: n[i]=1 for w1,c1 in n.items(): print(f"{w}:{c1}")
5. from collections import Counter cnt=Counter() for word in ['red','blue','green','red' ,'blue','red']: cnt[word]+=1 print(cnt)
6. def sqr(a): return(a\*a) print("Area of square:") print(sqr(5)) def rec(b,c): return(b\*c) print("Area of rectangle:") print(rec(10,10))
7. a="hello" b="java" #string op print(a) print(b) print(a+b) print(a\*2) print(a.upper()) print(a.lower())
8. def show(): print("Welcome") show()
9. def show(a,b): print(a\*b) show(5,2)
10. def show(a,b): return(a\*b) print(show(5,2))
11. s=input("enter a string:") for i in s: if s.count(i)>1: print(i)
12. s=input("enter a string:") for i in s: print("count of",i,"is",s.count (i))
13. s=input("Enter a string:") e = "" for i in s: if i not in e: print("count of", i, "is", .count(i)) e +=i
14. print(5/3) print(5//3) print(5%3) print(-5%3) print(-10%3) print(10%-3) print(-10%-3) print("5==3 is",5==3) print("5>3 is ",5>3) print("5!=3 is",5!=3)
15. n=int(input("enter a number:")) if n>0: print("given num is positive") elif n<0: print("given num is negative") else: print("given num is zero")
16. age=int(input("enter your age:")) citizenship=str(input("enter your citizenship:")) if age>=18 and citizenship=="indian": print("you are eligible to vote in india ") else: print("you are not eligible to vote in india")
17. s="xneifowxjaifuenxna" print(s.find('w'))
18. def rev(w1,w2): if len(w1) != len(w2): return False i=0 j=len(w2)-1 while j>=0: print(i,j) if w1[i] != w2[j]: return False i=i+1 j=j-1 return True print(rev("post","stop"))
19. print([4,5,6,7]\*2) print([1]\*5) a1=[2,3,4,5] a2=[3] a1.extend(a2) a2.extend(a1) print(a1)
20. def add(a=2,b=3): print(a+b) add()
21. def add(a=2,b=3): print(a+b) add(4,6)
22. def add(a,b=3): print(a+b) add(5)
23. def calculate(a,b,operation="add"): if operation=="add": return a+b elif operation=="sub": return a-b elif operation=="mul": return a\*b else: return ("unknown operation") print(calculate(5,2,"sub")) print(calculate(5,2)) print(calculate(5,2,"mul"))
24. import math print(math.factorial(5)) print(math.sqrt(144)) print(math.log(4) print(math.sin(30)) print(math.cos(30)) print(math.tan(45)) print(math.log1p(4)) print(math.floor(2.89) print(math.trunc(2.8))
25. import math def f1(a): return a\*2 def f2(b): return b\*3 r=f1(f2(5)) print(r) add=lambda x,y:x+y print(add(4,5))
26. def student (\*\*kwargs): for key,values in kwargs.items(): print(f"{key}:{values}") student(name="KRISHNA",age=25)
27. def add(\*args): s=0 for i in args: s=s+i return s print(add(3,4,5,8,6))
28. bal=1000 while True: print("1.balance check:") print("2.withdaw: ") print("3.deposit:") print("4.exit:") break opt=int(input("enter your option:")) if opt==1: print("balance amount:",bal) elif opt==2: amnt=int(input("amount to be withdrawn:")) bal=bal-amnt print("amount withdrawn:",amnt) elif opt==3: amnt=int(input("amount to deposit:")) bal=bal+amnt print("amount deposited:",amnt) elif opt==4: print("exitingggg!!!!") else: print("invalid choice")
29. x=[3,5,6] y=[3,5,6] z=x c=3 print(x is y) print(x is z) print(x==y) print(x is not у) print(c in x) print(c in y) print(c in z) colours=["red","white","blue","brown"] print("red" in colours ) print("blue"not in colours)
30. sub=input("enter subject:") mark=int(input("enter marks:")) if sub=="math" or sub=="Math": if mark>=50: print("pass") else: print("fail") else: if mark>=40: print("pass") else: print("fail")
31. def fact(n): if n==1: return 1 else: return n\*fact(n-1) print(fact(5))
32. def multiply(x,y,z): c=x\*y\*z return c l=int(input("enter a number:")) m=int(input("enter a number:")) n=int(input("enter a number:")) print(multiply(l,m,n))
33. import math pi=math.pi print(pi) def volume(r): c=4/3\*pi\*(r\*r\*r) return c print(volume (a)) a=float(input("enter radius:")) print(volume (a))
34. def sum(n): if n==1: return 1 else: return n+sum(n-1) print(sum(5))
35. a=10 c=3 def show(): a=5 print(a) print(c) show() print(a)
36. a=10 c=3 def show(): b=5 print(b) print(c) show() print(a) print(b) print(c)
37. def multiply(a,b): print(a\*b) c=multiply(2,3) print(c)
38. print([4,5,6,7]\*2) print([1]\*5) a1=[2,3,4,5] a2=[3] a1.extend(a2) a2.extend(a1) print(a1)