Python practical

#slip no.1

#fibonacci series

print("fibonacci: \n")

n=int(input("Enter Number:"))

n1=0

n2=1

count=0

if n<=0:

print("positive number")

elif n==1:

print("Fibonacci series:","\n",n,":",end="")

print(n1)

else:

print("Fibonacci series:")

while (count<n):

print(n1,end="")

n3=n1+n2

n1=n2

n2=n3

count+=1

#slip no 2

#swap tuple

print("\n swap tuple:\n")

a=10

b=20

print("before swapping:",a,b)

temp=a

a=b

b=temp

print("after swapping:",a,b)

#slipno3

#read write file

f1=open('first.txt',r)

f2=open('second.txt',w)

line=f1.readline()

f2.write(line)

f1.close()

f2.close()

#slip no 4

#factorial

n=int(input("enter number:"))

def check\_fact(n):

fact=1

if n<0:

print("negative number")

elif(n==0):

print("factorial is 0")

else:

for i in range(1,n+1):

fact=fact\*i

print("factorial:",fact)

check\_fact(n)

#slipno5

#creat class print data

class employee:

def getdata(self):

self.name=input("Enter Name:")

self.department=input("Enter Department:")

self.salary=int(input("Enter Salary:"))

def putdata(self):

print("\nEmployee Details:")

print("Employee Name:",self.name)

print("Employee Department:",self.department)

print("Employee Salary:",self.salary)

emp=employee()

emp.getdata()

emp.putdata()

#slip no 6

#area triangle ,circle

b=5

h=6

r=3

t=b\*h/2

print("area of triangle:",t)

c=3.14\*r\*r

print("area of circle:",c)

#slip no 7

#exception

try:

a=10

b=0

n=a/b

print("a/b=%d,"%c)

except Exception:

print("can't divide by zero")

print(Exception)

else:

print(n=a/b)

print("\n")

#slip no 8

#string cancatenation

str1="hello"

str2="world!"

str3=str1+str2

print(str3)

#slip no 9

#largest number

a=int(input("enter first number:"))

b=int(input("enter second number:"))

c=int(input("enter third number:"))

if(a>= b) and (a>= c):

largest=a

elif(b >=a)and (b >=c):

largest=b

else:

largest=c

print("the largest number:",largest)

#slip no 10

#palidrome

n=int(input("enter number:"))

temp=n

rev=0

while(n>0):

dig=n%10

rev=rev\*10+dig

n=n//10

if(temp==rev):

print("palidrome")

else:

print("not a palidrome")

#slip no 11

#list max,min,rev

print("list")

l1=[1,2,3,4,5]

print("maximum:",max(l1))

print("minimum:",min(l1))

l1.reverse()

print("reverse:",l1)

print("\n")

#slip no 12

#tuple max,min

print("tuple")

t1=(1,2,3,4,5,6,)

print("maximum:",max(t1))

print("minimum:",min(t1))

print("\n")

#slip no 13

#set operations

print("set")

a={1,2,3,4,5,6}

b={11,2,33,4,55,66}

print("union:",a|b)

print("intersection:",a&b)

print("difference:",a-b)

print("symmetric difference:",a^b)

#slip no 14

#calculate lowercase,uppercase letter

s=str(input("enter string:"))

def check\_case(s):

l\_case=0

u\_case=0

for i in s:

if i.isupper():

u\_case+=1

if i.islower():

l\_case+=1

print("lowercase:",l\_case)

print("uppercase:",u\_case)

check\_case(s)

#slip no 15

#module

def clgname():

name=input("enter collage name:")

print("my collage name is:",name)

"""

slip15\_2.p

from slip15\_1 import\*

print(clgname())

"""

#slip no 16

#matrices

import numpy as np

a=np.array([[10,10],[20,20]])

b=np.array([[11,12],[22,23]])

print("addition:\n",np.add(a,b))

print("subtraction:\n",np.subtract(a,b))

print("multiplication:\n",np.multiply(a,b))

print("division:\n",np.divide(a,b))

#slip no 17

#class

class Degree:

def getDegree(self):

print("I got a Degree")

class Undergraduate:

def getDegree(self):

print("I am Undergraduate")

class Postgraduate:

def getDegree(self):

print("I am Postgraduate")

d=Degree()

u=Undergraduate()

p=Postgraduate()

d. getDegree()

u. getDegree()

p. getDegree()

#slip no 18

#zero error exception

print("zeroerror exception")

n=10

m=0

try:

n/m

except:

print("can't divide by zero")

else:

print(n/m)

print("\n")

#slip no 19

#prime number

print("prime number")

num=int(input("enter number:"))

flag=False

if num>1:

for i in range(2,num):

if(num%i)==0:

flag=True

break

if flag:

print("prime number:",num)

else:

print("prime not number:",num)

print("\n")

#slip no 20

#square perimeter

print("square area perimeter")

n=int(input("enter number:"))

area=n\*n

print("area of square:",area)

per=4\*n

print("perimeter of square",per)