1.import sys

print(sys.version)

4. print("Hello Python")

5. print("Hello","Python",sep="\n")

6. print("Mysirg")

7. print("\"helllo\"")

8.a="Nitesh"

print(a)

9.a="Nitesh"

b=20

c="1st yr"

d="begginer"

print(a,b,c,d)

10.

a=3

b=3

c=6

print(a,b,c,sep="\n")

A2

1.

#comments here

print("Learning python")

2.

"""hello world"""

a=1

b=2

c=3

d=4

print(a,b,c,d,sep="\n")

3.

a=35

b=True

c="MysirG"

d=5.46

e=3+4j

print(type(a),type(b),type(c),type(d),type(e))

4.

a=5

b=5

print(id(a),id(b))

5. a=35

b=True

c="MysirG"

d=5.46

e=3+4j

print(type(a),type(b),type(c),type(d),type(e))

print(id(a),id(b),id(c),id(d),id(e))

6.

import keyword

print(keyword.kwlist)

9.True,False,None-Soft Keywords

10.

from datetime import datetime

dt=datetime.today();

print(dt)

d1=dt.strftime("%d-%m-%Y and %H:%M:%S %p")

print(d1)

A3

1.

a=2

print(str(a))

2.

print(ord("m"))

3.

print(chr(100))

4.

a=5

print(bin(a))

5.

a=5

print(oct(a))

6.

a=5

print(hex(a))

7.

a=0b110101

print(a)

8.

a=0x2f

print(oct(a))

9.

a=0o125

print(bin(a))

10.

a=0o25

b=0x39

print(bin(a)+bin(b))

A4

1.

a=input("enter ur name: ")

print(a)

2.

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

print(a)

3.

a=int(input("enter 1st number"))

b=int(input("enter 2nd number"))

print(a+b)

4.

a=int(input("enter radius"))

print(a\*a\*3.14)

5.

a=int(input("enter the number"))

print(a\*a)

6..

a=int(input("enter the height of triangle"))

b=int(input("enter the base of triangle"))

print(a\*b\*0.5)

7.

a,b,c=int(input("enter 1st numbers")),int(input("enter 2nd numbers")),int(input("enter 3rd numbers"))

print((a+b+c)/3)

8.

a,b,c=int(input("enter principle amt")),int(input("enter interest rate")),int(input("enter time "))

print((a\*b\*c)/100)

9.

a,b,c=int(input("enter length")),int(input("enter breadth")),int(input("enter height"))

print((a\*b\*c))

10.

a,b=int(input("enter length")),int(input("enter breadth"))

print((a\*b))

A5

1.

a=int(input("enter the num"))

print(int(a/10))

2.

a=int(input("enter the num"))

print(int(a%10))

3

a=int(input("enter the num"))

b=int(input("enter the num"))

print("before swapping a=%d,b=%d"%(a,b))

a,b=b,a

print("after swapping a=%d b=%d"%(a,b))

4.

a=int(input("enter the base"))

b=int(input("enter the pow"))

print(a\*\*b)

5.

a=int(input("enter the 3 digit number"))

print(int(a/100))

6.

a=int(input("enter the 3 digit number"))

print(int(a/10)%10)

7.

a=int(input("enter the 3 digit number"))

print(int(a%10))

8.

a=(input("enter the elements seperated by comma"))

b=a.split(",")

c=str(input("enter the number"))

print(c in b)

9.

a=(input("enter the elements seperated by comma"))

b=a.split(",")

c=str(input("enter the number"))

print(c not in b)

10.

a=input("enter the 1st number")

b=input("enter the 2nd number")

print(a is b)

A6

1.

a=int(input("enter the 1st number"))

if a>0:

print("positive")

else:

print("non positive")

2.

a=int(input("enter the 1st number"))

if a%5==0:

print("Divisible")

else:

print("Not divisible")

3

a=int(input("enter the 1st number"))

if a%2==0:

print("Even")

else:

print("Odd")

4.

a=int(input("enter the 1st number"))

b=int(input("enter the 2nd number"))

if a>b:

print(a)

else:

print(b)

5.

a=input("enter the 1st word")

b=input("enter the 2nd word")

if a>b:

print(b)

print(a)

else:

print(a)

print(b)

6.

a=int(input("enter the number "))

b=a/100

if b>=1 and b<10:

print("yes")

else:

print("no")

8.

a,b,c=int(input("enter the coefficient of a ")),int(input("enter the coefficient of b ")),int(input("enter the value of c ")),

d=b\*b-4\*a\*c

if d>0:

print("Real and distinct roots ")

elif d<0:

print("Imaginary roots")

else:

print("Equal roots")

9

a=int(input("enter the year "))

if a%400==0:

print("Leap year")

elif a%4==0 and a%100!=0:

print("Leap year")

else:

print("NOt leap")

10.

a,b,c=int(input("enter the no. ")),int(input("enter the no. ")),int(input("enter the no. "))

if a>b and a>c:

print(a)

elif b>a and b>c:

print(b)

else:

print(c)

11.

a=int(input("enter the month no. "))

if a in [1,3,5,7,8,10,12]:

print("31 days")

elif a in [4,6,9,11]:

print("30 days")

else:

print("28 or 29 days")

12.

a=complex(input("enter the complex no. "))

print(type(a))

if a.real>a.imag:

print(a.real)

else:

print(a.imag)

A7.

1.

a=int(input("enter month no."))

if(a in [1,3,5,7,8,10,12]):

print("31 days")

elif a in [4,6,9,11]:

print("30 days")

else:

print("28 or 29 days")

2

print("addition=1","subtraction=2","multiplication=3","division=4",sep="\n")

a=int(input("enter ur choice"))

b,c=int(input("enter 1st no.")),int(input("enter 2nd no."))

match a:

case 1:

print(b+c)

case 2:

print(b-c)

case 3:

print(b\*c)

case 4:

if c!=0:

print(b/c)

case 5:

print("invalid input")

3-

a=int(input("enter 1st side of triangle"))

b=int(input("enter 2nd side of triangle"))

c=int(input("enter 3rd side of triangle"))

print("enter 1 to check if a triangle is isoceles")

print("enter 2 to check if a triangle is right angled")

print("enter 3 to check if a triangle is equilateral")

print("enter 4 to exit")

d=int(input("enter your choice"))

match d:

case 1 if a==b or a==c or b==c:

print("its isoceles")

case 2 if a\*\*2=b\*\*2+c\*\*2 or b\*\*2=a\*\*2+c\*\*2 or c\*\*2=a\*\*2+b\*\*2:

print("its right angled")

case 3 if a==b==c:

print("its equilateral")

case 4:

exit()

4-

a=int(input("enter the age"))

match a:

case 1 if 0<a<10:

print("kid")

case 2 if 9<a<20:

print("teen")

case 3 if 19<a<40:

print("young")

case 4 if 39<a<60:

print("experienced")

case 5 if a>59:

print("senior citizen")

5-

a=int(input("enter the number"))

match a:

case 1 if a%2==0:

print("Saurabh Shukla")

case 2 if a%2!=0 and a<0:

print("Prateek Jain")

case 3 if a%2!=0 and a>0:

print("Aditya Choudhary")

case 4:

print("invalid input")

6-

a=str(input("enter the string"))

b=[e for e in a.strip() if e==" "]

match b:

case b if len(b)>0:

print("multiword")

case b if len(b)=0:

print("single word")

7-

a=int(input("enter a no."))

match a:

case a if a>0:

print("positive")

case a if a<0:

print("negative")

case a if a==0:

print("zero")

8-

a=str(input("enter 1st string"))

b=str(input("enter 2nd string"))

if a==b:

print("equal")

elif(a>b):

print(b,"comes first")

else:

print(a,"comes first")

9-

a=int(input("enter year"))

match a:

case a if a%400==0:

print("Century leap year")

case a if a%4==0 and a%100!=0:

print("non century leap year")

case a if a%100!=0 and a%4!=0:

print("non century non leap year")

case a if a%100==0 and a%400!=0:

print("Century non leap year")

10-

print("yellow","blue","orange","white","black","red"sep="\n")

c=str(input("enter fav color"))

a=c.strip()

b=(c.split(" "))

match c:

case c if a=="yellow" or c in b:

print("Monday")

case c if a=="blue" or c in b:

print("Tuesday")

case c if a=="orange" or c in b:

print("Wednesday")

case c if a=="white" or c in b:

print("Thursday")

case c if a=="black" or c in b:

print("Friday")

case c if a=="red" or c in b:

print("Saturday")

case \_:

print("Sunday")

A8

1-

i=0

while i<5:

print("MysirG")

i+=1

2-

i=1

while i<=10:

print(i)

i+=1

3-

i=10

while i>0:

print(i)

i-=1

4-

i=1

while i<=10:

print(2\*i-1)

i+=1

5-

i=10

while i>0:

print(2\*i-1)

i-=1

6-

i=1

while i<=10:

print(2\*i)

i+=1

7-

i=10

while i>0:

print(2\*i)

i-=1

8-

i=1

while i<=10:

print(i\*\*2)

i+=1

9-

i=1

while i<=10:

print(i\*\*3)

i+=1

10-

i=1

while i<=10:

print(i\*5)

i+=1

A9

1-

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

i=0

while i<n:

print("MysirG")

i+=1

2-

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

i=1

while i<=n:

print(i)

i+=1

3-

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

i=n

while i>0:

print(i)

i-=1

4-

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

i=1

while i<=n:

print(2\*i-1)

i+=1

5-

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

i=n

while i>0:

print(2\*i-1)

i-=1

6-

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

i=n

while i>0:

print(2\*i-1)

i-=1

7-

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

i=n

while i>0:

print(2\*i)

i-=1

8-

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

i=1

while i<=n:

print(i\*\*2)

i+=1

9-

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

i=1

while i<=n:

print(i\*\*3)

i+=1

10-

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

i=1

while i<=n:

print(i\*10)

i+=1

A10

1.

for i in range(10):

print((i+1)\*5)

2.

n=int(input("enter the no."))

for i in range(10):

print((i+1)\*n)

3.

n=int(input("enter the no."))

m=int(input("enter m"))

for i in range(m):

print((i+1)\*n)

4.

n=int(input("enter the no."))

for i in range(10,0,-1):

print((i)\*n)

5.

n=int(input("Which table do u want us to print "))

for i in range(10):

print((i+1)\*n)

6.

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

for i in range(n):

print((i+1)\*2)

7.

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

for i in range(n):

print((i+1)\*2-1)

8.

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

for i in range(n):

print((i+1)\*\*2)

9-

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

for i in range(n):

print((i+1)\*\*3)

10.

A11

1-

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

sum=0

for e in range(0,n,1):

a=int(input())

sum+=a

print(sum)

2-

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

sum=0

for e in range(0,n,1):

a=int(input())

sum+=a\*a

print(sum)

3-

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

sum=0

for e in range(0,n,1):

a=int(input())

sum+=a\*\*3

print(sum)

4-

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

sum=0

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

sum+=2\*e-1

print(sum)

5-

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

sum=0

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

sum+=2\*e

print(sum)

6-

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

fact=1

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

fact=fact\*e

print(fact)

7-

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

sum=0

while n>=1:

sum+=1

n=n/10

print(sum)

8-

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

sum=0

a=0

while n>=1:

a=n%10

n=int(n/10)

sum+=a

print(sum)

9-

A12

1

n=int(input("enter the no."))

sum=0

rem=0

while n>=1:

rem=n%10

sum=sum\*10+rem

n=int(n/10)

print(sum)

2-

n=int(input("enter the no."))

divisor=2

while divisor<n:

if(n%divisor==0):

print("Its not a prime number")

break

divisor+=1

else:

print("it is a prime number")

3-

n=int(input("enter the no."))

l1=[int(e) for e in range(2,n+1,1)]

i=2

pos=0

while i<=100\*\*0.5:

for e in range(i,101,i):

if(e in l1 and e!=i):

l1.remove(e)

i+=1

print(l1)

4-

s,end=int(input("enter the no.")),int(input("enter the no."))

l1=[int(e) for e in range(s,end+1,1)]

i=2

pos=0

while i<=end\*\*0.5:

for e in range(i,end+1,i):

if(e in l1 and e!=i):

l1.remove(e)

i+=1

l2=[]

l2=[int(e) for e in l1 if e>=s]

print(l2)

5-

def prime(n):

i=2

l1=[int(e) for e in range(2,n+20,1)]

while i<=n\*\*0.5:

for e in range(i,n+20,i):

if(e in l1 and e!=i):

l1.remove(e)

i+=1

for e in l1:

if(e>n):

print(e)

break

n=int(input("enter the no."))

prime(n)

6-

def prime(n):

i=2

l1=[int(e) for e in range(2,n+1,1)]

while i<=n\*\*0.5:

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

if(e in l1 and e!=i):

l1.remove(e)

i+=1

print(l1)

n=int(input("enter the no."))

prime(n)

7-

def lcm(a,b):

for e in range(max(a,b),a\*b+1,1):

if(e%a==0 and e%b==0):

return e

a=int(input("enter 1st number"))

b=int(input("enter 2nd number"))

if(lcm(a,b)==a\*b):

print("The numbers are co prime")

else:

print("The numbers are not co prime")

8-

def fib(n):

if(n==1 or n==0):

return n

return fib(n-1)+fib(n-2)

a=int(input("enter the range"))

l1=[]

for e in range(0,a,1):

l1.append(fib(e))

print(l1)

9-

def lcm(a,b):

for e in range(max(a,b),a\*b+1,1):

if(e%a==0 and e%b==0):

return e

a=int(input("enter 1st number"))

b=int(input("enter 2nd number"))

print(lcm(a,b))

10

def lcm(a,b):

for e in range(max(a,b),a\*b+1,1):

if(e%a==0 and e%b==0):

return e

a=int(input("enter 1st number"))

b=int(input("enter 2nd number"))

print(int((a\*b)/lcm(a,b)))

A13

1-

l1=["Java","Python","SQL","C"]

print(l1)

2-

l1=["Java","Python","SQL","C"]

print(type(l1))

3-

mylist = ["Java", "C", "Python"]

print(mylist[len(mylist)-1])

4-

thislist = ["Java", "SQL", "C", "Reactnative","Javascript", "Python"]

i=0

for e in thislist:

if(e=="SQL"):

thislist[i]="NOSQL"

if(e=="Reactnative"):

thislist[i]="FLUTTER"

i+=1

print(thislist)

5-

mylist =["Java", "SQL", "C", "Reactnative"]

mylist.append("Python")

print(mylist)

6-

firstlist = ["Java", "Python", "SQL"]

secondlist = ["C", "Cpp", "NoSQL"]

for e in secondlist:

firstlist.append(e)

print(firstlist)

7-

thislist =["Java", "SQL", "C", "Reactnative", "Javascript", "Python"]

i=0

for e in thislist:

print(e,"index=",i)

i+=1

8-

l1=["Java", "SQL","C", "Reactjs", "Javascript", "Python"]

print(sorted(l1))

9-

n=int(input("enter the no. of cities"))

l1=[]

for e in range(n):

city\_name=input("enter the name of city")

l1.append(city\_name)

print("The cities entered are",l1)

10-

A14

1-

n=int(input("enter the no. of values in list"))

l1=[]

i=1

for e in range(n):

l1.append(i)

i+=1

print(l1)

2-

n=int(input("enter the no. of values in list"))

l1=[]

i=1

for e in range(n):

l1.append(2\*i-1)

i+=1

print(l1)

3-

n=int(input("enter the no. of values in list"))

l1=[]

i=1

for e in range(n):

l1.append(2\*i)

i+=1

print(l1)

4-

n=int(input("enter the no. of values in list"))

l1=[]

for e in range(n):

l1.append(input("enter the number"))

print(max(l1))

5-

n=int(input("enter the no. of values in list"))

l1=[]

for e in range(n):

l1.append(input("enter the number"))

print(min(l1))

6-

n=int(input("enter the no. of values in list"))

l1=[]

for e in range(n):

l1.append(int(input("enter the number")))

print(sum(l1))

7-

n=int(input("enter the no. of values in list"))

l1=[]

i=0

for e in range(n):

a=eval(input("enter the value"))

l1.append(a)

print(l1)

if(type(l1[i])!=int):

l1.remove(l1[i])

i-=1

i+=1

print(l1)

8-

l1=["hi","hello","cat","hi","hi","ca"]

l2=sorted(l1)

count=1

i=0

l3=[]

while i<len(l2)-1:

if l2[i]==l2[i+1]:

count+=1

else:

l3.append(count)

count=1

i+=1

l3.append(count)

i=0

count=0

sumlist=[]

for e in l3:

count=count+l3[i]

sumlist.append(count)

i+=1

i=0

while i<len(l3):

print(l2[sumlist[i]-1],l3[i])

i+=1

9-

l1=["hi","hello","cat","hi","hi","ca"]

string=str(input("enter the name of the string to obtain indices"))

l2=[]

i=0

for e in l1:

if(e==string):

l2.append(i+1)

i+=1

print(l2)

10-

A15-

1-

a="hello"

l1=["a","p","p"]

b="app"

c="le"

d=b+c

s="".join(l1)

print(a)

print(s)

print(d)

2-

a="iNeuron"

b=a[0:5:1]

print(b)

3-

a="Hello Learners"

b=a[1:6:1]

print(b)

4-

a="Learning"

b="Python"

print(a+" "+b)

5-

a="iNeuron"

print(len(a))

6-

a="iNeuron"

print(a[::-1])

7-

a="iNeuron"

b="ron"

if b in a:

print("yes")

else:

print("no")

8-

a="190"

i=0

for e in a:

if ord(e) not in range(48,58,1):

print("The string is not fully numerical")

break

else:

print("All characters are numbers")

9-

a="AzfdfjkpuywgAZ"

i=0

for e in a:

if ord(e) not in range(65,91,1) and ord(e) not in range(97,123,1):

print("The string is not fully alphabetical")

break

else:

print("All characters are alphabets")

10-

a=12

print(type(a))

a=str(a)

print(type(a))

A16-