List of Programs for Computer Science Practical file – XI

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1. Write a program to accepts two integers and print their sum.

2. Write a program that accepts radius of a circle and prints its area.

3. Write a program that accepts base and height and calculate the area of triangle.

4. Write a program that inputs a student's marks in three subjects (out of 100) and prints the percentage marks.

5. Write a program to compute area of square and triangle.

6. Write a program to calculate simple interest.

7. Write a program to read two numbers and prints their quotient and reminder.

8. Write a program to find whether a given number is even or odd.

9. Write a program to find largest among three integers.

10. Write a program to find lowest among three integers.

11. Write a program that accepts length and breadth of rectangle and calculate its area.

12. Write a program that accepts weight in Kg and height in meters and calculate the BMI.

13. Write a program that reads the number n and print the value of n^2, n^3 and n'.

14. Write a program to accept the marks of five subjects and calculate the average marks.

15. Write a program to accept the height in cm and convert it into feet and inches.

16. Write a program that accepts the age and print if one is eligible to vote or not.

17. Write a program that accepts two numbers and check if the first number is fully divisible by second number or not.

18. Write a program to read base, width and height of parallelogram and calculate its area and perimeter.

19. Write a program to accept the year and check if it is a leap year or not.

20. Write a program to obtain x, y, z and calculate $4x'+3y^3+9z+6\pi$.

21. Write a program to input a number and print its square if it is odd, otherwise print its square root.

22. Write a program to input a number and check whether it is positive, negative or zero.

23. Write a program to input percentage marks of a student and find the grade as per following criterion:

Marks	Grade
>=90	A
75-90	B
60-75	C
Below 60	D

24.Write a program to enter a number and check if it is a prime number or not.

25.Write a program to display a menu for calculating area of circle or perimeter of the circle.

26.Write a program that reads two numbers and an arithmetic operator and displays the computed result.

27.Write a program to print whether a given character is an uppercase or a lowercase character or a digit or any other character.

28.Write a program to calculate and print the roots of a quadratic equation $ax^2+bx+c=0.(a\neq0)$

29.Write a program to print sum of natural numbers between 1 to 7. Print the sum progressively i.e. after adding each natural number, print sum so far.

30.Write a program to calculate the factorial of a number.

31.Write a program to create a triangle of stars using nested loop.

32.Write a Python script to print Fibonacci series' first 20 elements. 33.Write a program to read an integer>1000 and reverse the number.

34.Input three angles and determine if they form a triangle or not.

35.Write a Python script that displays first ten Mersenne numbers.

36.Write a Python script that displays first ten Mersenne numbers and displays 'Prime' next to Mersenne Prime Numbers.

37.Write a program to calculate BMI and print the nutritional status as per following table: Nutritional Status WHO criteria BMI cut-off Underweight

Nutritional Status	WHO criteria BMI cut-off Underweight
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obese	≥30

38.Write python script to print following pattern.

1

1 3

1 3 5

1 3 5 7

39. Write a program to find sum of series : $s=1+x+x^2+x^3+x'...+x^n$

40.Write a python script to input two numbers and print their lcm and hcf.

41.Write a python script to calculate the sum of the following series: S=(1)+(1+2)+(1+2+3)+……+(1+2+3+….+n)

42.Write a program to print the following using a single loop (no nested loops)

1

1 1

1 1 1

1 1 1 1

1 1 1 1 1

43. Write a program to print a pattern like:

4 3 2 1
4 3 2
4 3
4

44.Program that reads a line and print its statistics like:

Number of uppercase letters:

Number of lowercase letters:

Number of alphabets:

Number of digits

45.Write a program that reads a line and a substring and displays the number of occurrences of the given substring in the line.

46.Write a program that takes a string with multiple words and then capitalizes the first letter of each word and forms a new string out of it.

47.Write a program that reads a string and checks whether it is a palindrome string or not.

48.Write a program that reads a string and displays the longest substring of the given string having just the consonants.

49.Write a program that reads a string and then prints a string that capitalizes every other letter in the string.

50.Write a program that reads the email id of a person in the form of a string and ensures that it belongs to domain @edupillar.com (Assumption: no invalid characters are there in email-id)

51.WAP to remove all odd numbers from the given list.

52.WAP to display second largest element of a given list.

53.WAP to display frequencies of all the elements of a list.

54.WAP in Python to find and display the sum of all the values which are ending with 3 from a list.

55.WAP to search an element from the given list.

56.WAP to accept values from user and create a tuple.

57.Write a program to input total number of sections and stream name in 11th class and display all information on the output screen.

58. Write a program to input total number of sections and stream name in 11th class and display all information on the output screen.

59.WAP to store students' details like admission number, roll number, name and percentage in a dictionary and display information on the basis of admission number.

60.Write a Python program to remove an item from a tuple.

61. Write a program to input n numbers from the user. Store these numbers in a tuple. Print the maximum, minimum, sum and mean of number from this tuple

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SOLUTION

 # 1. Write a program to accepts two integers and print their sum.

```
a=int(input('Enter the first integer:'))
b=int(input('Enter the second integer:'))

Sum=a+b

print('The two integers are:', a, b)
print('The sum of two integers are:', Sum)
```

 # 2.Write a program that accepts radius of a circle and prints its area.

```
r=int(input('Enter the radius of circle:'))
Area=3.14*r**2
print('The area of the circle is:', Area)
```

#3. Write a program that accepts base and height and calculate the area of triangle

```
b=float(input('Enter the base of triangle:'))
h=float(input('Enter the height of triangle:'))

Area=(1/2)*b*h

print('The area of triangle is:', Area)
```

 # 4. Write a program that inputs a student's marks in three subjects (out of 100)and prints the percentage marks

```
print('Enter the marks of three subject out of 100')
a=float(input('Enter the marks of first subject:'))
b=float(input('Enter the marks of second subject:'))
c=float(input('Enter the marks of third subject:'))

P=(a+b+c)/3
print('The percentage marks are:', P,'%')
```

 # 5. Write a program to compute area of square and triangle.

```
a=float(input('Enter the value of side:'))

A=a**2
T=((3**0.5)/4)*a**2

print('The area of square is:', A)
print('The area of triangle is:', T)
```

 # 6.Write a program to calculate simple interest.

```
P=float(input('Enter the principal amount in : '))
R=float(input('Enter the rate of interest: '))
T=float(input('Enter the time in years: '))

SI=(P*R*T)/100

print('The simple interest is : ', SI)
```

#7. Write a program to read two numbers and prints their quotient and reminder

```
a=float(input('Enter the dividend:'))
b=float(input('Enter the divisor:'))

Q=a//b
R=a%b

print('The quotient is:', Q)
print('The remainder is:', R)
```

 # 8. Write a program to find whether a given number is even or odd.

```
a=int(input('Enter the number:'))
if a%2==0:
   print('The number is even')
else:
   print('The number is odd')
```

 # 9.Write a program to find largest among three integers

```
a=int(input('Enter the first integer:'))
b=int(input('Enter the second integer:'))
c=int(input('Enter the third integer:'))

if a>b and a>c:
   print(a, 'is the largest integer')
if b>a and b>c:
   print(b, 'is the largest integer')
if c>a and c>b:
   print(c, 'is the largest integer')
```

 # 10.Write a program to find lowest among three integer.

```
a=int(input('Enter the first integer:'))
b=int(input('Enter the second integer:'))
c=int(input('Enter the third integer:'))

ifa<b and a<c:
   print(a, 'is the smallest integer')
ifb<a and b<c:
   print(b, 'is the smallest integer')
ifc<a and c<b:
   print(c, 'is the smallest integer')
```

#11. Write a program to that accepts length and breadth of rectangle and calculate its area.

```
l=float(input('Enter the length of rectangle:'))
b=float(input('Enter the breadth of rectangle:'))
area=l*b

print('Rectangle Specifications')
print('Length=',l)
print('Breadth=', b)
print('Area=', area)
```

#12. Write a program that accepts weight in Kg and height in meters and calculate the BMI.

```
W = float(input('Enter the weight in Kg:'))
H = float(input('Enter height in meters:'))
BMI=W/(H**2)

print('BMI is:', BMI)
```

 # 13. Write a program that reads the number n and print the value of n^2, n^3 and n^4.

```
a=float(input('Enter the value of n:'))
b=a**2
c=a**3
d=a**4
print('The value of n² is:', b)
print('The value of n³ is:', c)
print('The value of n⁴ is:', d)
```

#14. Write a program to accept the marks of five subjects and calculate the average marks.

```
a=float(input('Enter the marks of first subject:'))
b=float(input('Enter the marks of second subject:'))
c=float(input('Enter the marks of third subject:'))
d=float(input('Enter the marks of fourth subject:'))
e=float(input('Enter the marks of fifth subject:'))
Average=(a+b+c+d+e)/5
print('The average marks are:', Average)
```

 # 15. Write a program to accept the height in cm and convert it into feet and inches.

```
a=float(input('Enter your height in centimeters:'))

Feet=a*0.032
Inch=a*0.393

print('Your height in feet is:', Feet)
print('Your height in inch is:', Inch)
```

 # 16. Write a program that accepts the age and print if one is eligible to vote or not.

```
a=int(input('Enter your age:'))
if a>=18:
   print('You are eligible to vote')
else:
   print('You are not eligible to vote')
```

#17. Write a program that accepts two numbers and check if the first number is fully divisible by #second number or not.

```
a=float(input('Enter the first number:'))
b=float(input('Enter the second number:'))
if a%b==0:
    print('The first number is fully divisible by second number')
else:
```

```
    print('The first number is not fully divisible by second number')
```

#18. Write a program to read base, width and height of
#parallelogram and calculate its area and perimeter.

```
b=float(input('Enter the base of parallelogram:'))
w=float(input('Enter the width of parallelogram:'))
h=float(input('Enter the height of parallelogram:'))

Area=b*h
Perimeter=2*(b+w)

print('The area of parallelogram is:', Area)
print('The perimeter of parallelogram is:', Perimeter)
```

#19. Write a program to accept the year and
 # check if it is a leap year or not.

```
a=int(input('Enter the year:'))
if a%4==0:
    print('This year is a leap year')
else:
    print('This year is not a leap year')
```

 # 20. Write a program to obtain x, y, z and calculate $4x^4+3y^3+9z+6\pi$.

```
import math
print('To calculate 4x⁴+3y³+9z+6π')
x=float(input('Enter the number x:'))
y=float(input('Enter the number y:'))
z=float(input('Enter the number z:'))

b=(4*math.pow(x,4))+(3*math.pow(y,3))+(9*z)+(6*math.pi)
print('The result of the above expression is:',b)
```

 # 21. Write a program to input a number and print its
 # square if it is odd, otherwise print its square root.

```
import math

x=float(input('Enter the number:'))

a=math.pow(x,2)
b=math.sqrt(x)
if x%2!=0:
    print('The value of square is:',a)
else:
    print('The value of square root is:',b)
```

 # 22. Write a program to input a number and check whether it is positive, negative or zero.

```
a=float(input('Enter the number:'))

if a>=0:
    if a==0:
        print('The number is zero')
    else:
        print('The number is a positive number')
```

```
else:
    print('The number is a negative number')
```

 # 23. Write a program to input percentage marks of a student and find the grade as per following criterion:

Marks	**Grade**
>=90	**A**
75-90	**B**
60-75	**C**
Below 60	**D**

```
'''
a=float(input('Enter the percentage marks:'))
if a>=90:
    print('The student has got an A grade')
elif a>=75 and a<90:
    print('The student has got a B grade')
elif a>=60 and a<75:
    print('The student has got a C grade')
else:
    print('The student has got a D grade')
```

 # 24. Write a program to enter a number and
 # check if it is a prime number or not.

```
num=int(input('Enter the number:'))
for i in range(2,num//2+1):
    if num%i==0:
      print('It is not a prime no.')
    break
else:
   print('It is a prime number')
```

 # 25. Write a program to display a menu for calculating
 # area of circle or perimeter of the circle.

```
r=float(input('Enter the radius of the circle:'))
print('1.Calculate perimeter')
print('2.Calculate area')
choice=int(input('Enter your choice (1 or 2):'))
if choice==1:
    peri=2*3.14159*r
    print('Perimeter of the circle with radius',r,':',peri)
else:
    area=3.14159*r*r
    print('Area of the circle of the radius',r,':',area)
```

 # 26. Write a program that reads two numbers and an
 # arithmetic operator and displays the computed result.

```
a=float(input('Enter the first number:'))
```

```
b=float(input('Enter the second number:'))
c=input('Enter the operator[/,*,+,-]:')
if c=='/':
   r=a/b
elif c=='*':
   r=a*b
elif c=='+':
   r=a+b
elif c=='-':
   r=a-b
else:
    print('Invalid operator')
print(a,c,b,'=',r)
```

 # 27. Write a program to print whether a given character
 # is an uppercase or a lowercase character or a digit or any other character.

```
ch=input('Enter a single character:')
if ch>='A'and ch<='Z':
    print('You have entered an uppercase character.')
elif ch>='a'and ch<='z':
    print('You have entered an lowercase character.')
elif ch>='0'and ch<='9':
    print('You have entered a digit.')
else:
    print('You have entered a special character.')
```

 # 28. Write a program to calculate and print the roots of a
 # quadratic equation $ax^2+bx+c=0.(a\neq0)$

```
import math
print('For quadratic equation, ax²+bx+c=0,enter coefficents below')
a=int(input('Enter a:'))
b=int(input('Enter b:'))
c=int(input('Enter c:'))
if a==0:
    print('Value of a should not be zero')
    print('Aborting!!')
else:
   d=b*b-4*a*c
if d>0:
    root1=(-b+math.sqrt(d))/(2*a)
    root2=(-b-math.sqrt(d))/(2*a)
    print('Roots are real and unequal')
    print('Root1=',root1,',Root2=',root2)
elif d==0:
    root1=-b/2*a
    print('Roots are real and equal')
    print('Root1=',root1,',Root2=',root1)
else:
    print('Roots are complex and imaginary')
```

 # 29. Write a program to print the sum of natural numbers between 1 to 20.
 # Print the sum progressively i.e. after adding each natural number,
 # print sum so far.

```
Sum=0
for n in range(1,21):
   Sum+=n
print('Sum of natural numbers <=',n,'is',Sum)
```

 # 30. Write a program to calculate the factorial of a number.

```
num=int(input('Enter a number:'))
fact=1
a=1
while a<=num:
   fact*=a
   a+=1
print('The factorial of',num,'is',fact)
```

 # 31. Write a program to create a triangle of stars using nested loop.

```
for i in range(1,6):
    print()
    for j in range(1,i):
        print('*',end=' ')
```

 # 32. Write a Python script to print Fibonacci series' first 10 elements.

```
first=0
second=1
print(first, end=' ')
print(second,end=' ')
for a in range(1,9):
    third=first+second
    print(third,end=' ')
    first,second=second,third
```

 # 33. Write a program to read an integer>1000 and reverse the number.

```
num=int(input('Enter a number (>1000):'))
tnum=num
reverse=0
while tnum>0:
   digit=tnum%10
   reverse=reverse*10+digit
   tnum=tnum//10
print('Reverse of',num,'is',reverse)
```

 # 34. Input three angles and determine if they form a triangle or not.

```
angle1=angle2=angle3=0
angle1=float(input('Enter the first angle:'))
angle2=float(input('Enter the second angle:'))
angle3=float(input('Enter the third angle:'))
```

```
if angle1+angle2+angle3==180:
    print('The angles form a triangle')
else:
    print('The angles do not form a triangle')
```

 # 35. Write a Python script that displays first ten Mersenne numbers.

```
print('First 10 Mersenne numbers are:')
for a in range(1,11):
    mersnum=2**a-1
    print(mersnum,end=' ')
print()
```

 # 36. Write a Python script that displays first ten
 # Mersenne numbers and displays 'Prime' next to Mersenne Prime Numbers.

```
for a in range(1,21):
    mersnum=2**a-1
    mid=mersnum//2+1
    for b in range(2,mid):
        if mersnum%b==0:
            print(mersnum)
            break
    else:
        print(mersnum,'\tPrime')
```

 # 37. Write a program to calculate BMI and print
 # the nutritional status as per following table:

Nutritional Status	**WHO criteria (BMI cut-off)**
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obese	≥30

```
w=float(input('Enter the weight in kgs:'))
h=float(input('Enter the height in meters:'))
BMI=w/h**2
print('BMI is',BMI,end='')
if BMI<18.5:
    print('...Underweight')
elif BMI>=18.5 and BMI<24.9:
    print('...Normal')
elif BMI>=25 and BMI<29.9:
    print('...Overweight')
else:
    print('...Obese')
```

 # 38. Write python script to print the following pattern.

```
'''
1
1 3
1 3 5
1 3 5 7
'''
for a in range(3,10,2):
    print()
    for b in range(1,a,2):
        print(b, end=' ')
print()
```

 # 39. Write a program to find sum of series : $s=1+x+x^2+x^3+x^4...+x^n$

```
x=float(input('Enter the value of x:'))
n=int(input('Enter the value of n (for x**n):'))
s=0
for a in range(n+1):
   s+=x**a
print('Sum of first' ,n,'terms:',s)
```

#40.Write a python script to input two numbers
#and print their lcm and hcf.

```
x=int(input('Enter the first number:'))
y=int(input('Enter the second number:'))
if x>y:
   smaller=y
else:
   smaller=x
for i in range(1,smaller+1):
    if x%i==0 and y%i==0:
        hcf=i
        lcm=(x*y)/hcf
print('The HCF of',x,'and',y,'is:',hcf)
print('The LCM of',x,'and',y,'is:',lcm)
```

 # 41. Write a python script to calculate the
 # sum of the following series: S=(1)+(1+2)+(1+2+3)+……+(1+2+3+….+n)

```
Sum=0
n=int(input('How many terms?'))
for a in range(2,n+2):
    term=0
    for b in range(1,a):
        term+=b
    print('Term',(a-1),':',term)
    Sum+=term
print('Sum of',n,'terms is:',Sum)
```

#42.Write a program to print the following using a single loop (no nested loops)

1
11
111
1111
11111
'''

```
n=1
for a in range(5):
    print(n,end = ' ')
    print()
    n=n*10+1
```

#43. Write a program to print a pattern like:

4 3 2 1
4 3 2
4 3
4
'''

```
for i in range(4):
    for j in range(4,i,-1):
        print(j,end=' ')
    else:
        print()
```

#44. Program that reads a line and print its statistics like:

'''
Number of uppercase letters:
Number of lowercase letters:
Number of alphabets:
Number of digits:
'''

```
line=input('Enter a line:')
lowercount=uppercount=0
digitcount=alphacount=0

for a in line:
    if a.islower():
      lowercount+=1
    elif a.isupper():
      uppercount+=1
    elif a.isdigit():
```

```
        digitcount+=1
    if a.isalpha():
        alphacount+=1

print('Number of uppercase letters are:',uppercount)
print('Number of lowercase letters are:',lowercount)
print('Number of alphabets are:',alphacount)
print('Number of digits are:',digitcount)
```

#45. Write a program that reads a line and a substring
#and displays the number of occurrences of the given substring in the line.

```
line=input('Enter line:')
sub=input('Enter substring:')
length=len(line)
lensub=len(sub)
start=count=0
end=length

while True:
    pos=line.find(sub,start,end)
    if pos!=-1:
        count+=1
        start=pos+lensub
    else:
        break
    if start>=length:
        break
print('No. of occurences of',sub,':',count)
```

#46. Write a program that takes a string with multiple
#words and then capitalizes the first letter of each word
#and forms a new string out of it.

```
string=input('Enter a string:')
length=len(string)
a=0
end=length
string2=''

while a<length:
    if a==0:
        string2+=string[0].upper()
        a+=1
    elif(string[a]==' ' and string[a+1]!=' '):
        string2+=string[a]
        string2+=string[a+1].upper()
        a+=2
    elif (string[a]==',' and string[a+1]!=','):
        string2+=string[a]
        string2+=string[a+1].upper()
        a+=2
    else:
        string2+=string[a]
```

```
    a+=1
print('Original string:',string)
print('Capitalized words string:',string2)
```

#47. Write a program that reads a string and
#checks whether it is a palindrome string or not.

```
string=input('Enter a string:')
length=len(string)
mid=length//2
rev=-1
for a in range(mid):
    if string[a]==string[rev]:
        print(string,'is a palindrome.')
        break
    else:
        print(string,'is not palindrome')
```

#48. Write a program that reads a string and displays
#the longest substring of the given string having
#just the consonants.

```
string=input('Enter a string:')
length=len(string)
maxlength=0
maxsub=''
sub=''
lensub=0
for a in range(length):
    if string[a] in 'aeiou' or string[a] in 'AEIOU':
        if lensub>maxlength:
          maxsub=sub
          maxlength=lensub
          sub=''
          lensub=0
    else:
        sub+=string[a]
        lensub=len(sub)
        a+=1
print('Maximum length consonant substring is:',maxsub,end=' ')
print('with',maxlength,'characters')
```

 # 49. Write a program that reads a string and then
 # prints a string that capitalizes every other letter in the string.

```
string=input('Enter a string:')
length=len(string)
print('Original string:',string)
string2=''
for a in range(0,length,2):
    string2+=string[a]
    if a<length-1:
        string2+=string[a+1].upper()
print('Alternatively capitalized string:',string2)
```

 # 50. Write a program that reads the email id of a person
 # in the form of a string and ensures that it belongs to
 # domain @learnpython4cbse.com(Assumption:no invalid characters
 # are there in email-id)

```
email=input('Enter your email id:')
domain='@learnpython4cbse.com'
ledo=len(domain)      #ledo=length of domain
lema=len(email)       #lema=length of email
sub=email[lema-ledo:]

if sub==domain:
    if ledo!=lema:
        print('It is valid email id')
    else:
        print('This is invalid email id- contains just the domain name')
else:
    print('This email-d is either not valid or belongs to some other domain')
```

 # 51.WAP to remove all odd numbers from the given list.

```
L= [2, 7,12, 5,10,15,23]
for i in L:
    if i%2!=0:
        L.remove (i)
print (L)
```

 # 52. WAP to display second largest element of a given list.

```
L= [ 41, 6, 9, 13,4, 23]
m=max (L)
secmax=L[0]
for i in range(1, len(L) ) :
    if L[i]>secmax and L[i]<m:
        secmax=L[i]
print ('The second largest element is: ',secmax)
```

 # 53. WAP to display frequencies of all the elements of a list.

```
L= [3, 21, 5, 6, 3, 8, 21, 6]
L1= [ ]
L2= [ ]
print ('Element' , ' \t' , 'frequency' )
```

```
for i in L:
    if i not in L2:
        x=L.count(i)
        L1.append(x)
        L2.append(i)

for i in range(len(L1)):
    print (L2[i],'\t\t\t',L1[i])
```

#54. WAP in Python to find and display the sum of all the values which are ending with 3 from a list.

```
L=[33,13,92,99,3,12]
sum=0
x=len (L)
for i in range(0,x):
    if type (L [i])== int:
        if L[i]%10==3:
            sum+=L[i]
print (sum)
```

 # 55. WAP to search an element from the list

```
L=eval(input("Enter the elements:"))
n=len(L)
flag =1
s = int(input("Enter the element to be searched:"))
for i in range(0,n-1):
    if(L[i]==s):
        flag=1
        break;
    else:
        flag=0


if flag==1:
      print("Element found")
else:
      print("Elemnet not found")
```

 # 56. WAP to accept values from user and create a tuple.

```
t=tuple()
n=int(input("How many values you want to enter: "))
for i in range(n):
    a=input("Enter Number: ")
    t=t+(a,)
print("Entered Numbers are: ")
print(t)
```

 # 57. WAP to input any two tuples and swap their values

```
t1 = tuple()
n = int (input("Total no of values in First tuple: "))
for i in range(n):
    a = input("Enter Elements : ")
    t1 = t1 + (a,)
t2 = tuple()
m = int (input("Total no of values in Second tuple: "))
for i in range(m):
    a = input("Enter Elements : ")
    t2 = t2 + (a,)
print("First Tuple : ")
print(t1)
print("Second Tuple : ")
print(t2)

t1,t2 = t2, t1

print("After Swapping: ")
print("First Tuple : ")
print(t1)
print("Second Tuple : ")
print(t2)
```

```
# 58. Write a program to input total number of sections and
#stream name in 11th class and display all information
#on the output screen.
classxi=dict()
n=int(input("Enter total number of section in xi class: "))
i=1
while i<=n:
    a=input("Enter Section: ")
    b=input ("Enter stream name: ")
    classxi[i]=b
    i=i+1
print ("Class",'\t''Section''\t''Stream name')
for i in classxi:
    print ("XI",'\t',i,'\t',classxi[i])


# 59. WAP to store students' details like admission number, roll number,
# name and percentage in a dictionary and display information on the
# basis of admission number.

record = dict ()
i=1
n= int (input ("How many records u want to enter: "))
while(i<=n):
    Adm = input("Enter Admission number: ")
    roll = input("Enter Roll Number: ")
    name = input("Enter Name :")
    perc = float(input("Enter Percentage : "))
    t = (roll,name, perc)
    record[Adm] = t
    i = i + 1
```

```
Nkey = record.keys()
for i in Nkey:
    print("\nAdmno- ", i, " :")
    r = record[i]
    print("Roll No\t", "Name\t", "Percentage\t")
    for j in r:
        print(j, end = "\t")
```

 # 60. Write a Python program to remove an item from a tuple.

```
#create a tuple
tuplex = "l","e","a","r","n","p","y","t","h","o","n","4","c","b","s","e"
print("Tuple Before Removing an item")
print(tuplex)
#converting the tuple to list
listx = list(tuplex)
#use different ways to remove an item of the list
listx.remove("4")
#converting the tuple to list
tuplex = tuple(listx)
print("\nTuple After Removing an item '4'")
print(tuplex)
```

 # 61. Write a program to input n numbers from the user.
 # Store these numbers in a tuple. Print the maximum,
 # minimum, sum and mean of number from this tuple.

```
numbers = tuple() #create an empty tuple 'numbers'
n = int(input("How many numbers you want to enter?: "))
print("Enter any ",n," numbers")
for i in range(0,n):
    num = int(input())
#it will assign numbers entered by user to tuple 'numbers'
    numbers = numbers +(num,)
print('\nThe numbers in the tuple are:')
print(numbers)
print("\nThe maximum number is: ")
print(max(numbers))
print("The minimum number is: ")
print(min(numbers))
print("The sum of numbers is: ")
print(sum(numbers))
print("The mean of numbers is: ")
mean = sum(numbers)/(i+1)
print(mean)
ele=int(input("Enter the element to be searched: "))
if ele in numbers:
    print("Element found")
```

```
else:
    print("Element not found")
```

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