**Question 01 :**

gen=input("Enter Your Gender :")

sal=int(input("Enter Your Salary :"))

if(gen=="Male"):

salary=sal+(sal\*0.05)

print("The Bonus Salary is :",salary)

if(sal<10000):

bonus=salary+(sal\*0.02)

print("The Salary after additional Bonus is :",bonus)

elif(gen=="Female"):

salary=sal+(sal\*0.01)

print("The Bonus Salary is :",salary)

if(sal<10000):

bonus=salary+(sal\*0.02)

print("The Salary after additional Bonus is :",bonus)

else:

print("You have entered wrong Choice")

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 19.py

Enter Your Gender :Male

Enter Your Salary :20000

The Bonus Salary is : 21000.0

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 19.py

Enter Your Gender :Female

Enter Your Salary :10000

The Bonus Salary is : 10100.0

>>>

Question 2 :

Write to take input from the users and then check whether it is a number or character, if it is character, determine whether it is Lowercase or Uppercase using If-elif-else.

Program :

ch = input("Enter Your Own Character : ")

if(ch >= 'A' and ch <= 'Z'):

print("The Given Character ", ch, "is an Uppercase Alphabet")

elif(ch >= 'a' and ch <= 'z'):

print("The Given Character ", ch, "is a Lowercase Alphabet")

elif(ch >= '0' and ch <= '9'):

print("The Given Character ", ch, "is a Numeric Value")

else:

print("The Given Character ", ch, "is Not a Lower or Uppercase Alphabet")

**Output :**

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 01.py

Enter Your Own Character : A

The Given Character A is an Uppercase Alphabet

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 01.py

Enter Your Own Character : g

The Given Character g is a Lowercase Alphabet

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 01.py

Enter Your Own Character : 6

The Given Character 6 is a Numeric Value

>>>

Question 03 :

#WAP to Read untill -1 is encountered and also count Positive, negative and Zeros.

pos=0

neg=0

zero=0

while(1):

print("Enter The Values :")

n=int(input())

if(n==-1):

print("-1 is encountered!")

break

elif(n<0):

print(n,"is Negative.")

neg=neg+1

elif(n>0):

print(n,"is Positive")

pos=pos+1

else:

print(n,"is found.")

zero=zero+1

print("Total Number of Postive Number Encountered Are :",pos)

print("Total Number of Negative Number Encountered Are :",neg)

print("Total Number of Zeros Encountered Are :",zero)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 15.py

Enter The Values :

1

1 is Positive

Enter The Values :

5

5 is Positive

Enter The Values :

3

3 is Positive

Enter The Values :

-4

-4 is Negative.

Enter The Values :

-5

-5 is Negative.

Enter The Values :

-1

-1 is encountered!

Total Number of Postive Number Encountered Are : 3

Total Number of Negative Number Encountered Are : 2

Total Number of Zeros Encountered Are : 0

>>>

Question 04 :

Program :

Output :

Question 05 :

Program :

#Conversion of Decimal Number to Binary Number Using Python.

print("Convert the Decimal Number to Binary Number.")

a=int(input("Enter the Decimal Number :"))

print("Binary Number :",bin(a))

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 02.py

Convert the Decimal Number to Binary Number.

Enter the Decimal Number :2

Binary Number : 0b10

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 02.py

Convert the Decimal Number to Binary Number.

Enter the Decimal Number :34

Binary Number : 0b100010

>>>

Question 06 :

Program :

#WAP to Read untill a is encountered and also count UpperCase,

#Lowercase and Numeric Values.

upper=0

lower=0

num=0

while(1):

print("Enter The Alphabets :")

n=(input())

if(n=='a'):

print("a is encountered!")

break

elif(n>='A'and n<='Z'):

print(n,"is UpperCase Character.")

upper=upper+1

elif(n>='b' and n<='z'):

print(n,"is LowerCase Character.")

lower=lower+1

elif(n>='0' and n<='9'):

print(n,"is Numeric Values.")

num=num+1

else:

print(n,"is not found.")

print("Total Number of UpperCase Characters Encountered Are :",upper)

print("Total Number of LowerCase Characters Encountered Are :",lower)

print("Total Number of Numeric Values Encountered Are :",num)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 18.py

Enter The Alphabets :

A

A is UpperCase Character.

Enter The Alphabets :

H

H is UpperCase Character.

Enter The Alphabets :

d

d is LowerCase Character.

Enter The Alphabets :

f

f is LowerCase Character.

Enter The Alphabets :

h

h is LowerCase Character.

Enter The Alphabets :

a

a is encountered!

Total Number of UpperCase Characters Encountered Are : 2

Total Number of LowerCase Characters Encountered Are : 3

Total Number of Numeric Values Encountered Are : 0

>>>

Question 07 :

Program :

#Enter the Number then Calculate the Sum of its Digits.

print("Enter the Values of A and B")

A=int(input("Enter the A :"))

B=int(input("Enter the B :"))

C=A+B

print("SUM :",C)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 03.py

Enter the Values of A and B

Enter the A :10

Enter the B :30

SUM : 40

>>>

Question 08 :

Program :

#To Print The Reverse Of The Numbers.

print("Reverse of the Number")

reverse = " "

num = input("Enter the Numeric Values :")

for i in range(len(num), 0, -1):

reverse += num[i-1]

print("Reversed Numbers are ",int(reverse))

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 04.py

Reverse of the Number

Enter the Numeric Values :123214

Reversed Numbers are 412321

>>>

Question 09 :

Program :

#To Calculate the Average Of The Natural Numbers.

print("Average Of The Natural Numbers.")

c=int()

print("Enter The Value of n :")

n=int(input())

for x in range(1,n,1):

c=c+x

print("Average of Natural Numbers are :",c)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 05.py

Average Of The Natural Numbers.

Enter The Value of n :

5

Average of Natural Numbers are : 10

>>>

Question 10 :

Program :

#To Print The Multiplication Table of n.

print("Enter the Value of n :")

num=int(input())

print("Display Of Multiplication Table.")

for x in range(1,11):

print(num,"x",x,"=",num\*x)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 06.py

Enter the Value of n :

5

Display Of Multiplication Table.

5 x 1 = 5

5 x 2 = 10

5 x 3 = 15

5 x 4 = 20

5 x 5 = 25

5 x 6 = 30

5 x 7 = 35

5 x 8 = 40

5 x 9 = 45

5 x 10 = 50

>>>

Question 11 :

Program :

#To Print No's From m to n and Classify Whether No's Even or Odd.

print("Enter The Value of m :")

m=int(input())

print("Enter The Value of n :")

n=int(input())

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

if (i % 2) == 0:

print("{0} is Even".format(i))

else:

print("{0} is Odd".format(i))

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 08.py

Enter The Value of m :

4

Enter The Value of n :

9

4 is Even

5 is Odd

6 is Even

7 is Odd

8 is Even

9 is Odd

>>>

Question 12 :

Program :

#To Calculate Factorial of n Numbers Using For loop

fact=1

print("Enter The Value of n :")

n=int(input())

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

fact=fact\*i

print("Factorial of",n,"Number is :",fact)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 07.py

Enter The Value of n :

5

Factorial of 5 Number is : 120

>>>

Question 13 :

Program :

#Sum of the Squares of Even Numbers.

sum=0

print("Enter The Value of n :")

n=int(input())

for i in range(0,n + 1):

sum+=(2\*i)\*(2\*i)

print("Sum of Squares of Even Numbers :",sum)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 09.py

Enter The Value of n :

5

Sum of Squares of Even Numbers : 220

>>>

Question 14 :

Program :

#To Print The Following Pattern 1.

print("Enter Number of Rows :")

n=int(input())

for i in range(0,n):

for j in range(0,i+1):

print("\* ",end="")

print("\r")

#To Print The Following Pattern 2.

print("Enter Number of Rows :")

m=int(input())

for i in range(1,m):

for j in range(0,i):

print(i ,end="")

print("\r")

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 10.py

Enter Number of Rows :

5

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

Enter Number of Rows :

5

1

22

333

4444

>>>

Question 16 :

Program :

#To Find Largest Number Among 3 Numbers.

num1 = float(input("Enter first number : "))

num2 = float(input("Enter second number : "))

num3 = float(input("Enter third number : "))

if (num1 > num2) and (num1 > num3):

largest = num1

elif (num2 > num1) and (num2 > num3):

largest = num2

else:

largest = num3

print("The largest number : ",largest)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 11.py

Enter first number : 14

Enter second number : 55

Enter third number : 36

The largest number : 55.0

Question 17:

Program :

#To Find The Armstrong Numbers.

print("Enter the Number : ")

num =int(input())

order = len(str(num))

# initialize sum

sum = 0

temp = num

while temp > 0:

digit = temp % 10

sum += digit \*\* order

temp //= 10

# display the result

if num == sum:

print(num,"is an Armstrong number")

else:

print(num,"is not an Armstrong number")

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 12.py

Enter the Number :

285

285 is not an Armstrong number

>>>

Question 18 :

Program :

# Program to display the Fibonacci sequence up to n-th

#term where n is provided by the user

nterms = int(input("Enter The Value :"))

n1 = 0

n2 = 1

count = 0

# check if the number of terms is valid

if nterms == 1:

print("Fibonacci sequence upto",nterms,":")

print(n1)

else:

print("Fibonacci sequence upto",nterms,":")

while count < nterms:

print(n1,end=' , ')

nth = n1 + n2

n1 = n2

n2 = nth

count += 1

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 13.py

Enter The Value :8

Fibonacci sequence upto 8 :

0 , 1 , 1 , 2 , 3 , 5 , 8 , 13 ,

>>>

Question 19 :

Program :

num1 = int(input("Enter First Number : "))

num2 = int(input("Enter Second Number : "))

print("Enter which operation would you like to perform?")

ch = input("Enter any of these char for specific operation +,-,\*,/: ")

result = 0

if ch == '+':

print("Addition :")

result = num1 + num2

elif ch == '-':

print("Subtraction :")

result = num1 - num2

elif ch == '\*':

print("Multiplication :")

result = num1 \* num2

elif ch == '/':

print("Division :")

result = num1 / num2

else:

print("Input character is not recognized!")

print(num1, ch , num2, ":", result)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 14.py

Enter First Number : 12

Enter Second Number : 34

Enter which operation would you like to perform?

Enter any of these char for specific operation +,-,\*,/: +

Addition :

12 + 34 : 46

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 14.py

Enter First Number : 24

Enter Second Number : 34

Enter which operation would you like to perform?

Enter any of these char for specific operation +,-,\*,/: -

Subtraction :

24 - 34 : -10

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 14.py

Enter First Number : 56

Enter Second Number : 43

Enter which operation would you like to perform?

Enter any of these char for specific operation +,-,\*,/: \*

Multiplication :

56 \* 43 : 2408

>>>

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 14.py

Enter First Number : 65

Enter Second Number : 35

Enter which operation would you like to perform?

Enter any of these char for specific operation +,-,\*,/: /

Division :

65 / 35 : 1.8571428571428572

>>>

Program 20 :

Program :

#WAP with Tuple of 10 Elements.

num=(10,20,30,40,50,60,70,80,90,100)

print("Tuple Elements are :",num)

print("")

print("Elements From 3rd Position to 8th position are :")

for x in num[2:8]:

print(x)

print("")

sum=num[3]+num[6]

print("Sum of the Elements from 4th to 7th Position are :",sum)

Output :

RESTART: D:\COMPUTER STUDY\COMPUTER NOTES\PROGRAMMING DATA\Python\Programs\Program 16.py

Tuple Elements are : (10, 20, 30, 40, 50, 60, 70, 80, 90, 100)

Elements From 3rd Position to 8th position are :

30

40

50

60

70

80

Sum of the Elements from 4th to 7th Position are : 110

>>>