

In [19]: *#1) Write a program to accept two numbers from the user and calculate multiplication, division.*

```
v1=int(input("Enter the First Number:"))
v2=float(input("Enter the Second Number:"))
print("The multiply of two numbers is: {} * {} = {}".format(v1,v2,v1*v2))
print("The Division of two numbers is: {} / {} = {}".format(v1,v2,v1/v2))
```

Enter the First Number:12

Enter the Second Number:5

The multiply of two numbers is: 12 * 5.0 = 60.0

The Division of two numbers is: 12 / 5.0 = 2.4

In [20]: *#2) Write a python program to print the characters from a string that are present at an even index.*

```
x=input("Enter the String:")
for y in range(len(x)):
    if y%2==0:
        print("The string is:",x[y])
```

Enter the String:string

The string is: s

The string is: r

The string is: n

In [5]: *#3) Write a python program to print the characters from a string that are present at an odd index*

```
x=input("Enter the String:")
for y in range(len(x)):
    if y%2!=0:
        print("The string is:",x[y])
```

Enter the String:string

The string is: t

The string is: i

The string is: g

```
In [3]: #4) Write a python program which will print the sum of the two numbers if the two numbers are even or it will print the difference of two numbers
v1=float(input("Enter the 1st Number:"))
v2=int(input("Enter the 2nd Number:"))
if v1%2==0 and v2%2==0:
    print("The Sum of two numbers is: {} + {} = {}".format(v1,v2,v1+v2))
else:
    print("The Difference of two numbers is: {} - {} = {}".format(v1,v2,v1-v2))
```

Enter the 1st Number:20

Enter the 2nd Number:40

The Sum of two numbers is: 20.0 + 40 = 60.0

```
In [11]: #5) Write a python program to convert all even indexed alphabets to upper and odd indexed char.
x=input("Enter the string: ")
y1=""
for y in range(len(x)):
    if y%2==0:
        y1=y1+x[y].upper()
    else:
        y1=y1+x[y].lower()
print(y1)
```

Enter the string: dineshreddy

DiNeShReDdY

```
In [25]: #6) Write a python program which will print True if the input number is divisible by 5 or else False
x=int(input("Enter a number:"))
if x%5==0:
    print("true {} it divisible by 5".format(x))
else:
    print("false {} it divisible by 5".format(x))
```

Enter a number:30

true 30 it divisible by 5

```
In [31]: #7) Given two integer numbers return their product only if the product is greater than 1000, else return their s
x=int(input("Enter the 1st Number:"))
y=int(input("Enter the 2nd Number"))
if x*y>1000:
    print("The product of numbers is {} * {} = {}".format(x,y,x*y))
else:
    print("The sum of numbers is {} + {} = {}".format(x,y,x+y))
```

Enter the 1st Number:25

Enter the 2nd Number:41

The product of numbers is 25 * 41 = 1025

```
In [33]: #8) Given two strings x, y writes a program to return a new string made of x and y's first, middle, and last cha
#Example:
#Input
#X=" pytho"
#Y=" javas"
#Output
#" pjtvos"
x=input("Type input first string: ")
y=input("Type input second string: ")
u=""
u=u+x[0]+y[0]+x[len(x)//2]+y[len(y)//2]+x[-1]+y[-1]
print(u)
```

Type input first string: dines

Type input second string: hreddy

dhndsy

```
In [36]: names("dinesh","vijay","bunny")
```

name 1: dinesh

name 2: vijay

name 3: bunny

In [50]: *#10) Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '@', except the first char itself.*
#Example:
#Input:
#'malayalam'
#Output:
#'malayala@'
#Input:
#' abcabab '
#Output:
#'abc@b@b'
`x=input("Enter the string: ")`
`s=x[0]`
`print(x[0]+x[1:].replace(s,"@"))`

Enter the string: abcabab
abc@b@b

```
In [7]: #11) Write a Python program to add 'ing' at the end of a given string (string length should be equal to or more
#the given string already ends with 'ing' then add 'ly' instead.If the string length of the given string is less
#leave it unchanged
#Example:
#Input:
# 'sing'
#Output:
# 'singing'
#Input:
# ' playing'
#Output:
# 'playly'
#Input:
# ' on'
#Output:
# 'on'
x=input("Enter the String: ")
s=""
if len(x)>=3:
    if x[-3:]=="ing":
        s=x[:-3]+"ly"
    else:
        s=x+"ing"
print(s)
```

Enter the String: dineshreddying
dineshreddyily

```
In [9]: #12) Write a python program that accepts two inputs num1 and num2 print True if one of them is 10 or if their su
#otherwise print False
def f(x,y):
    if x==10 or y==10 or x+y==10:
        print("True")
    else:
        print("False")
```

```
In [14]: f(5,3)
```

False

In [15]: `f(6,5)`

False

In [16]: `f(5,5)`

True

In [17]: `f(2,10)`

True

In [11]: *#13) Write a python program that accepts three inputs x, y and z print True if x*y>z otherwise False*

```
In [18]: def f(x,y,z):  
         if x*y>z:  
             print("True")  
         else:  
             print("False")
```

In [19]: `f(2,4,6)`

True

In [20]: `f(4,6,9)`

True

In [21]: `f(2,3,12)`

False

In [22]: *#14) Write a python program that accepts two strings inputs return True depending on whether the total number of #characters in the first string is equal to the total number of characters in the second string.*

```
def f(x,y):  
    if len(x)==len(y):  
        print("True")  
    else:  
        print("False")
```

In [23]: `f("dinesh","reddys")`

True

In [24]: `f("dinesh","reddy")`

False

In [4]: *#15) Write a python program that takes a string input, we'll say that the front is the first three characters of the string. If the string length is less than three characters, the front is whatever is there. Return a new string, which is the front.*

```
x=input("Enter the string: ")
y=""
if len(x)<3:
    y=x+x
elif len(x)>=3:
    y=x[:3]
print(y)
```

Enter the string: dinesh
din

In [6]: *#16) Write a python program that takes in a word and determines whether or not it is plural. A plural word is one that ends in "s".*

```
def f(x):
    if x[-1]=='s':
        print("The given string is Plural")
    else:
        print("The given string is not Plural")
```

In [7]: `f("dineshs")`

The given string is Plural

In [8]: `f("dinesh")`

The given string is not Plural

In [26]: #17) A bartender is writing a simple program to determine whether he should serve drinks to someone. He only serves drinks to people 18 and older and when he's not on break (True means break and False means not a break time). Given the person's age, and whether break time is in session, create a python program which prints whether he should serve drinks or not.

```
def f(x):  
    if x=="true":  
        print("Bartender should not serve drinks")  
    elif x=="false":  
        y=int(input("Age of the customer is:"))  
        if y>=18:  
            print("Bartender should serve drinks")  
        else:  
            print("Bartender should not serve drinks ")  
    else:  
        print("Input has to be True or False")
```

In [27]: f("true")

Bartender should not serve drinks

In [28]: f("false")

Age of the customer is:18
Bartender should serve drinks

In [29]: f("false")

Age of the customer is:19
Bartender should serve drinks

In [30]: f("false")

Age of the customer is:17
Bartender should not serve drinks


```
In [38]: #18) Manoj Kumar has family and friends. Help him remind them who is who. Given a string with a name, return the
#relation of that person to Manoj Kumar.Person Relation
#Shiva father
#Letha mother
#Tarun brother
x=input("enter a string:")
if x=="shiva":
    print("shiva is a father of manoj kumar")
elif x=="letha":
    print("letha is a mother of manoj kumar")
elif x=="Tarun":
    print("Tarun is a brother of manoj kumar")
```

```
enter a string:shiva
shiva is a father of manoj kumar
```

```
In [39]: #19) Write a python program that takes a string, breaks it up and returns it with vowels first, consonants second
#character that's not a vowel (like special characters or spaces), treat them like consonants.
x=input("Enter the String:")
y=""
z=""
p=('a','e','i','o','u')
for t in range(len(x)):
    if x[t] in p:
        y=y+x[t]
    else:
        z=z+x[t]
print(y+z)
```

```
Enter the String:dineshreddy
ieednshrddy
```

In [53]: #20) Create a dynamic calculator which asks for numbers and operator and return the answers

```
#Example
#Input:
#Type first number: 10
#Type any of this (+, -, *, /, %, **): *
#Kavitha sister
#Strange Coder
#Assignment-2
#Type second number: 19
#Output:
#Answer is 190
a=float(input("Enter first number : "))
b=(input("Enter the Sign : "))
c=float(input("Enter second number : "))
if b=='+':
    print("{} + {} = {}".format(a,c,a+c))
elif b=='-':
    print("{} - {} = {}".format(a,c,a-c))
elif b=='*':
    print("{} * {} = {}".format(a,c,a*c))
elif b=='/':
    print("{} / {} = {}".format(a,c,a/c))
elif b=='%':
    print("{} % {} = {}".format(a,c,a%c))
elif b=='**':
    print("{}^{} = {}".format(a,c,a**c))
else:
    print("Invalid Sign")
```

```
Enter first number : 23
Enter the Sign : *
Enter second number : 2
23.0 * 2.0 = 46.0
```