



# Graphic Era

HILL UNIVERSITY

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Society Area, Clement Town, Dehradun

[www.gehu.ac.in](http://www.gehu.ac.in)

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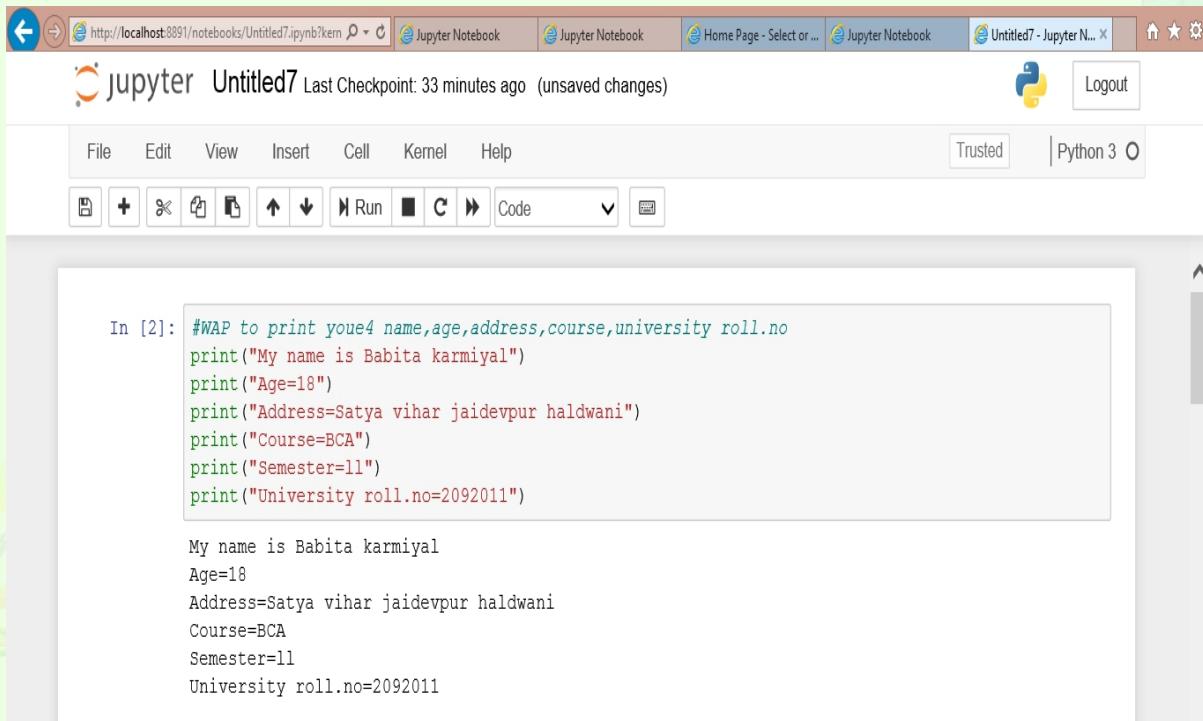
## **PYTHON PRACTICAL PROGRAMMING**

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## PYTHON PRACTICAL QUESTION:I

#WAP TO PRINT YOUR NAME, AGE, ADDRESS, COURSE, SEMESTER , ADDRESS, UNIVERSITY ROLL NO.

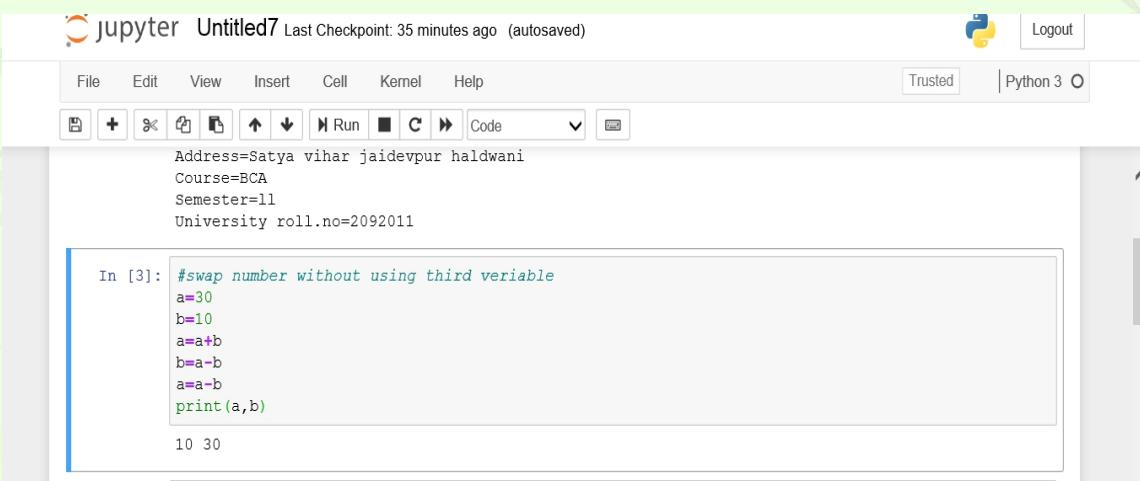


In [2]:

```
#WAP to print youe4 name,age,address,course,university roll.no
print("My name is Babita karmiyal")
print("Age=18")
print("Address=Satya vihar jaidevpur haldwani")
print("Course=BCA")
print("Semester=11")
print("University roll.no=2092011")
```

My name is Babita karmiyal  
Age=18  
Address=Satya vihar jaidevpur haldwani  
Course=BCA  
Semester=11  
University roll.no=2092011

2. WRITE A PYTHONE PROGRAM TO SWAP TWO NUMBERS WITHOUT USING ANY VARIABLES.



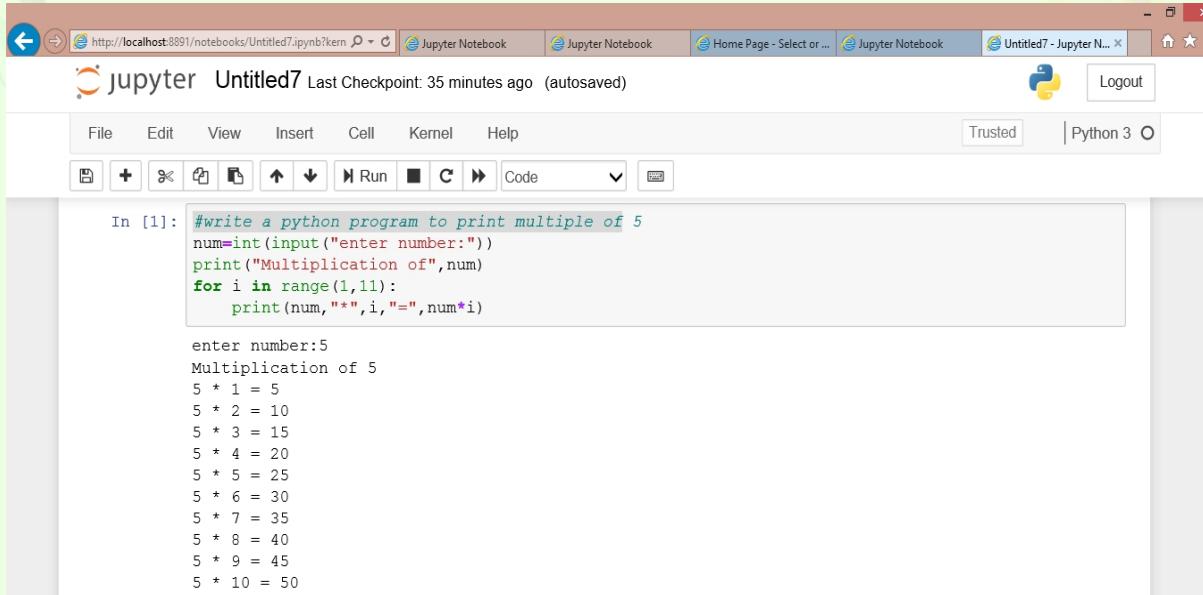
Address=Satya vihar jaidevpur haldwani  
Course=BCA  
Semester=11  
University roll.no=2092011

In [3]:

```
#swap number without using third variable
a=30
b=10
a=a+b
b=a-b
a=a-b
print(a,b)
```

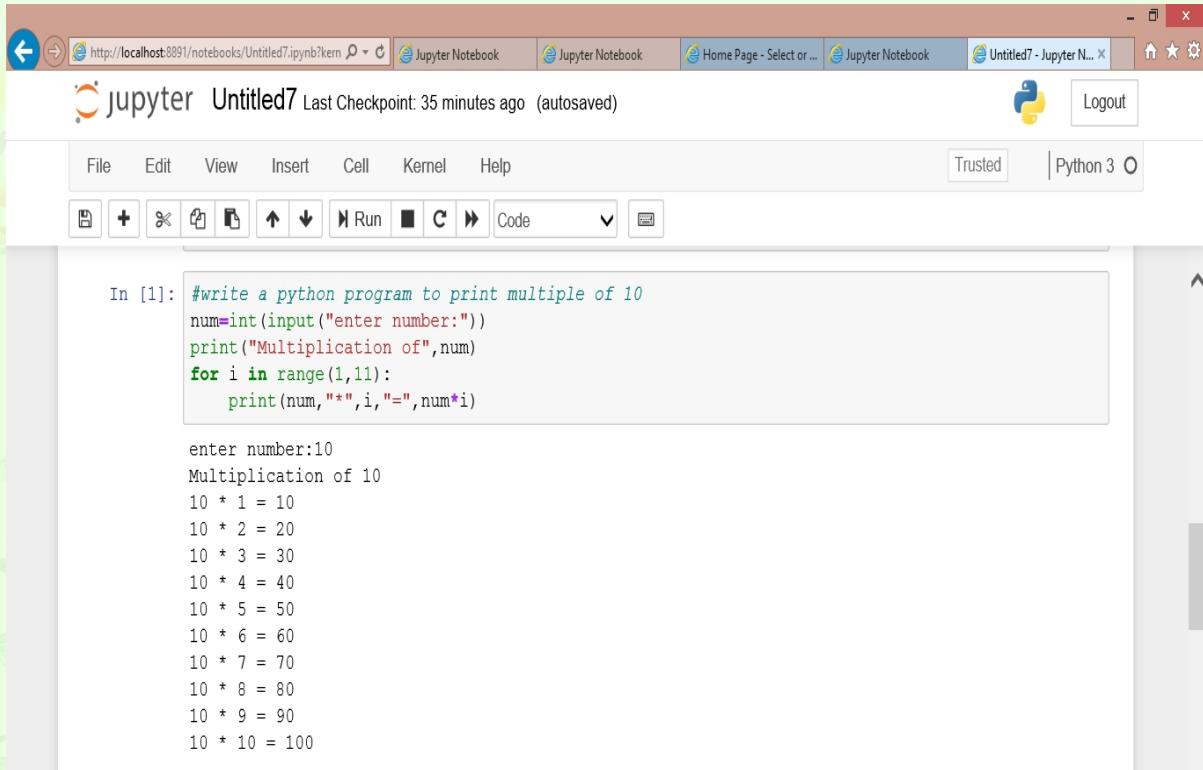
10 30

## . WRITE A PYTHON PROGRAM TO PRINT THE TABLES OF 5 AND 10



In [1]: `#write a python program to print multiple of 5  
num=int(input("enter number:"))  
print("Multiplication of",num)  
for i in range(1,11):  
 print(num,"*",i,"=",num*i)`

enter number:5  
Multiplication of 5  
5 \* 1 = 5  
5 \* 2 = 10  
5 \* 3 = 15  
5 \* 4 = 20  
5 \* 5 = 25  
5 \* 6 = 30  
5 \* 7 = 35  
5 \* 8 = 40  
5 \* 9 = 45  
5 \* 10 = 50

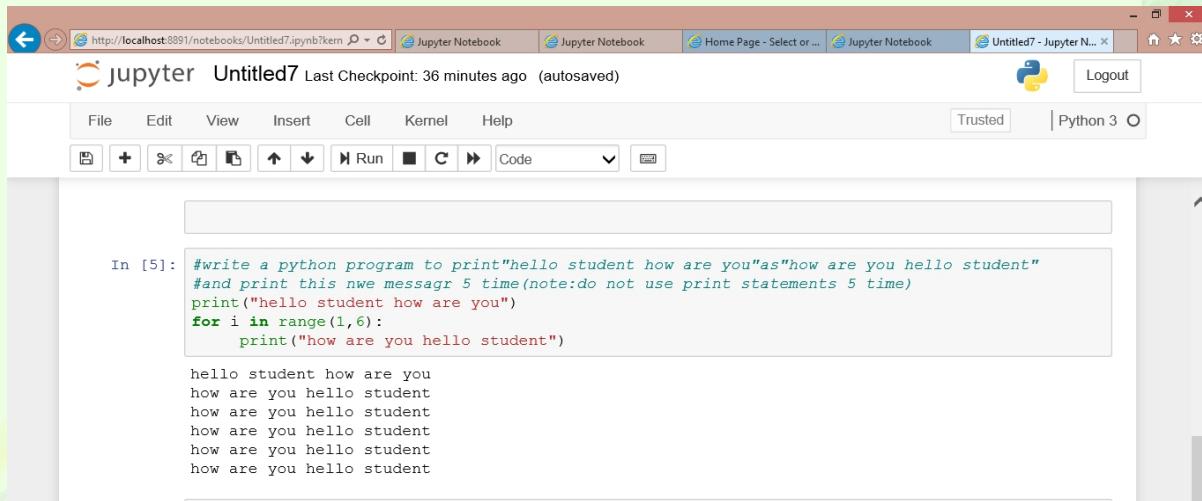


In [1]: `#write a python program to print multiple of 10  
num=int(input("enter number:"))  
print("Multiplication of",num)  
for i in range(1,11):  
 print(num,"*",i,"=",num*i)`

enter number:10  
Multiplication of 10  
10 \* 1 = 10  
10 \* 2 = 20  
10 \* 3 = 30  
10 \* 4 = 40  
10 \* 5 = 50  
10 \* 6 = 60  
10 \* 7 = 70  
10 \* 8 = 80  
10 \* 9 = 90  
10 \* 10 = 100

## PYTHON PRACTICAL PROGRAMMING 2:

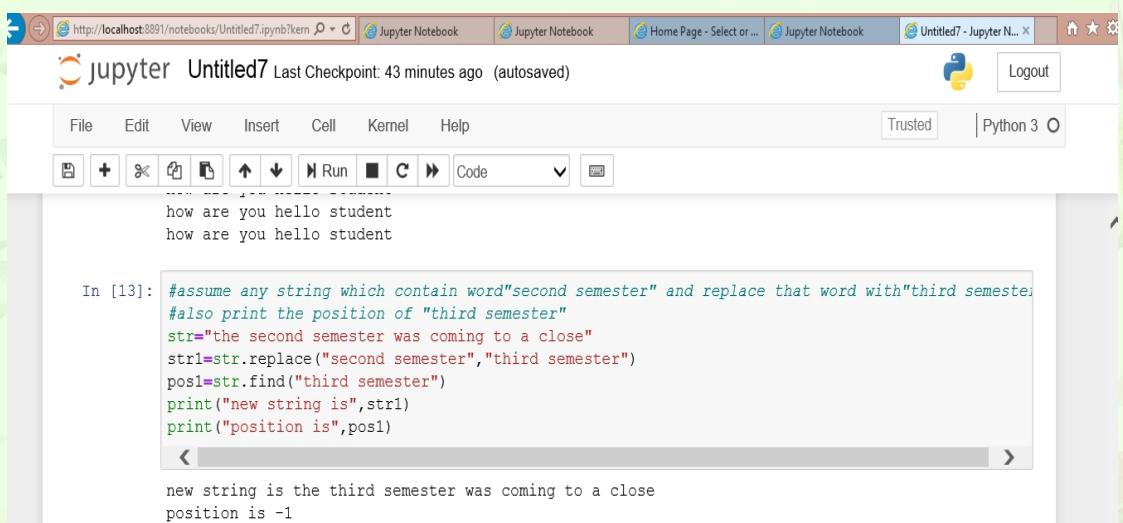
1. WRITE A PYTHON PROGRAMM TO PRINT “HELLO STUDENT HOW ARE YOU” AS “ HOW ARE YOU HLLO STUDENTDS” FIVE TIME WITHOUT USING PRINT STATEMENT 5 TIMES



```
In [5]: #write a python program to print"hello student how are you"as"how are you hello student"
#and print this nwe messagr 5 time(note:do not use print statements 5 time)
print("hello student how are you")
for i in range(1,6):
    print("how are you hello student")

hello student how are you
how are you hello student
```

2. ASSUME ANY STRING WHICH CONTAINS ” SECOND SEMESTER ” , REPLACE IT WITH ” THIRD SEMESTER ” . ALSO PRINT THE POSITION OF THIRS SEMESTER



```
In [13]: #assume any string which contain word"second semester" and replace that word with"third semester"
#also print the position of "third semester"
str="the second semester was coming to a close"
str1=str.replace("second semester","third semester")
pos1=str.find("third semester")
print("new string is",str1)
print("position is",pos1)

new string is the third semester was coming to a close
position is -1
```

3. TAKE ANY STRING WHICH CONTAINS MORE THAN TWO LINS ABOUT YOU. NOW COUNT NUMBER OF TIMES " I " OCCURS IN THE STRING

```
In [16]: #take any string which contains more than two lines about you.now count how many time character  
#appears in that string.
```

```
str='myself Babita karmiyal..my hobbies is  
reading books,dancing and i am doing\  
bca from graphic era...'  
print(str.count('i'))
```

```
9
```

4. consider any long string . now replace the space between two words with the tab.

```
jupyter Untitled33 Last Checkpoint: 7 minutes ago (unsaved changes) Logout
```

```
File Edit View Insert Cell Kernel Help Trusted Python 3
```

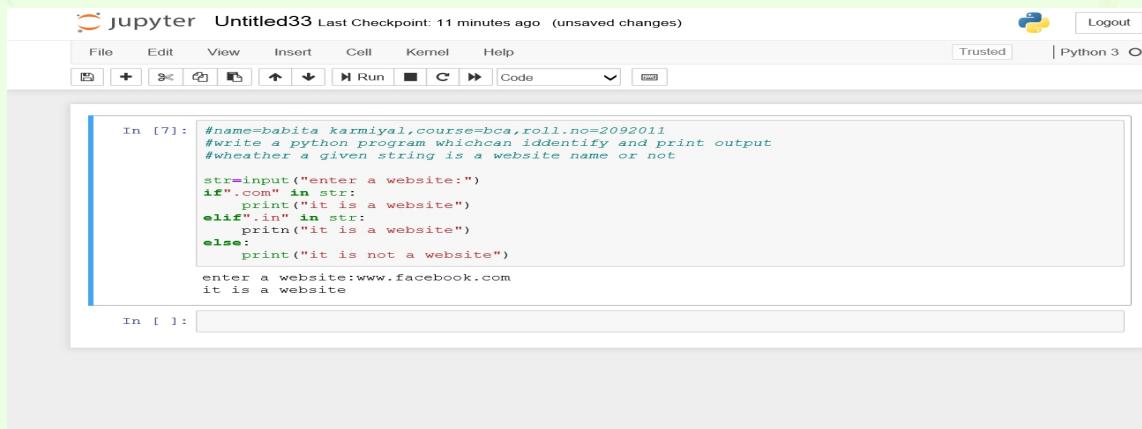
```
In [6]: #name=babita karmiyal,course=bca,roll.no=2092011|
```

```
#CONSIDER ANY LONG STRING,NOW REPLACE THE SPACE BWTWEEN TWO WORDS WITH THE TAB  
str=''' NOW REPLACE THE SPACE BWTWEEN TWO WORDS '''  
str=str.split()  
print("".join(str))
```

```
NOWREPLACETHESPACEBWTENTWOWORDS
```

```
In [ ]:
```

5. write a python program which can identify and print output whether a given string is a website name or not



A screenshot of a Jupyter Notebook interface. The title bar says "jupyter Untitled33 Last Checkpoint: 11 minutes ago (unsaved changes)". The menu bar includes File, Edit, View, Insert, Cell, Kernel, Help, and a Python 3 logo. The toolbar has buttons for cell operations like Run, Cell, Kernel, Help, and a Trusted checkbox. The code cell (In [7]) contains the following Python code:

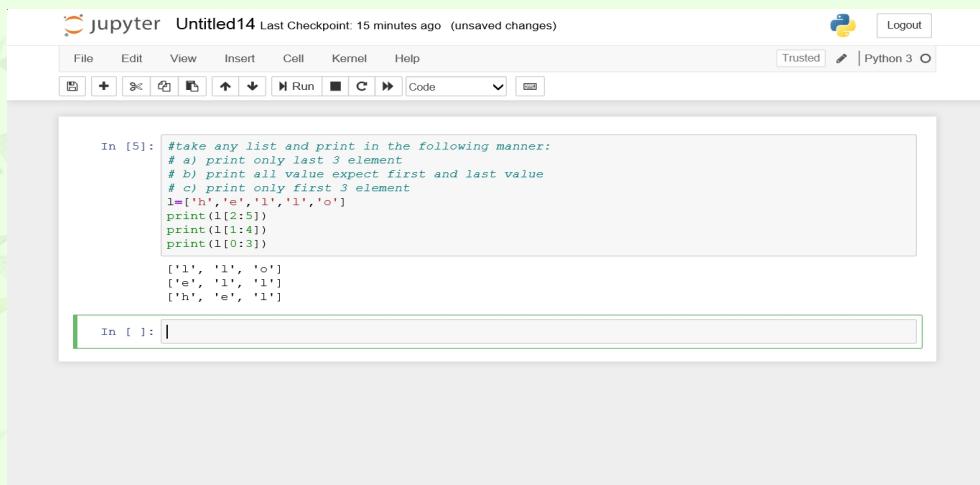
```
#name=babita karmiyal, course=bca, roll.no=2092011
#write a python program which can identify and print output
#whether a given string is a website name or not

str=input("enter a website:")
if ".com" in str:
    print("it is a website")
elif ".in" in str:
    print("it is a website")
else:
    print("it is not a website")

enter a website:www.facebook.com
it is a website
```

### Python practical question;3

1. take any list and print it in following manner,
  - a) print only last three element
  - b) print all values except the first and last value
  - c) print only three element

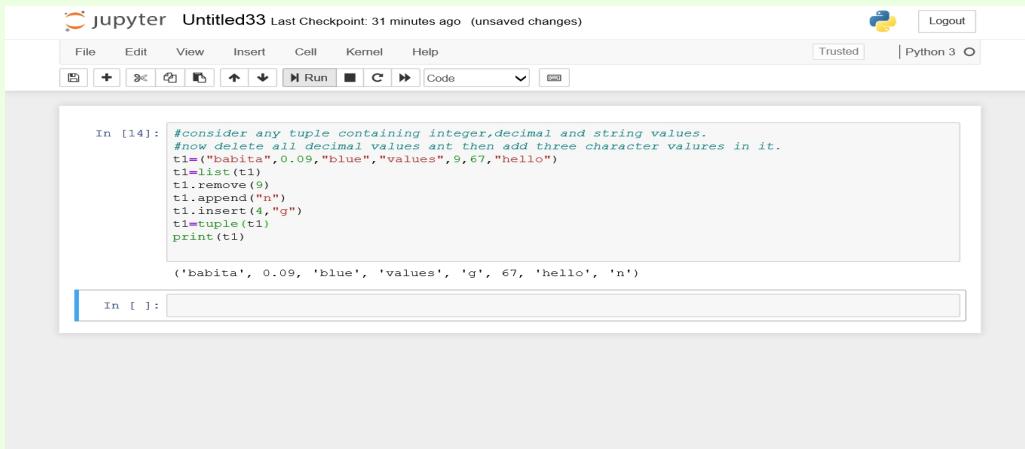


A screenshot of a Jupyter Notebook interface. The title bar says "jupyter Untitled14 Last Checkpoint: 15 minutes ago (unsaved changes)". The menu bar includes File, Edit, View, Insert, Cell, Kernel, Help, and a Python 3 logo. The toolbar has buttons for cell operations like Run, Cell, Kernel, Help, and a Trusted checkbox. The code cell (In [5]) contains the following Python code:

```
#take any list and print in the following manner:
# a) print only last 3 element
# b) print all value expect first and last value
# c) print only first 3 element
l=['h','e','l','l','o']
print(l[2:5])
print(l[1:4])
print(l[0:3])

['l', 'l', 'o']
['e', 'l', 'l']
['h', 'e', 'l']
```

3. consider any tuple containing integer, decimal and string values. now delete all decimal values and then add three character values in it



Jupyter Untitled33 Last Checkpoint: 31 minutes ago (unsaved changes)

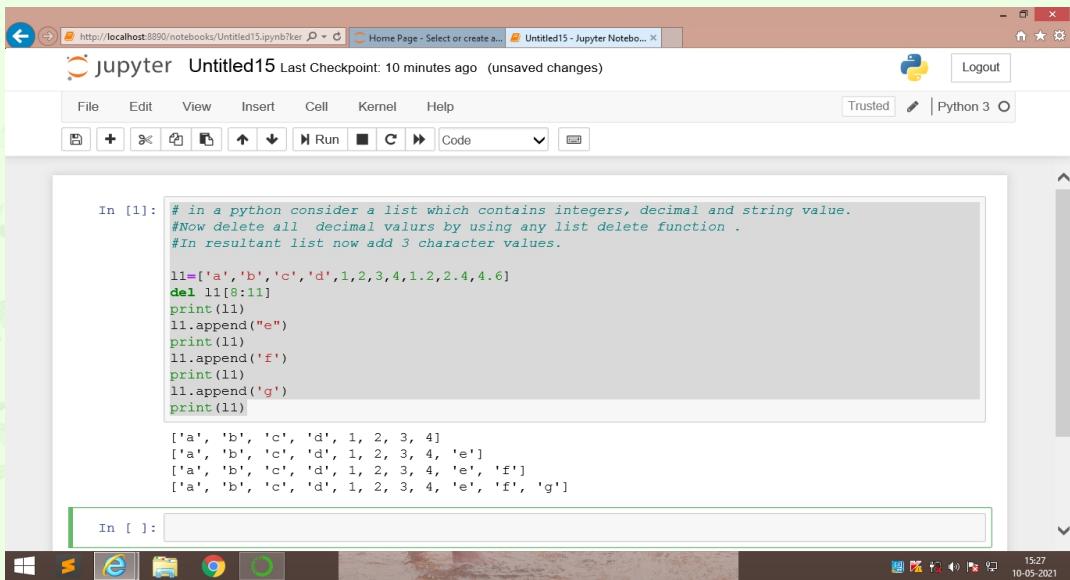
In [14]:

```
#consider any tuple containing integer,decimal and string values.
#now delete all decimal values ant then add three character values in it.
t1=("babita",0.09,"blue","values",9,67,"hello")
t1=list(t1)
t1.remove(9)
t1.append("n")
t1.insert(4,"g")
t1=tuple(t1)
print(t1)
```

('babita', 0.09, 'blue', 'values', 'g', 67, 'hello', 'n')

In [ ]:

2. in a python consider any list containing integer, decimal and string values, now delete all decimal values using any list delete functions and then add three character in it.



Jupyter Untitled15 Last Checkpoint: 10 minutes ago (unsaved changes)

In [1]:

```
# in a python consider a list which contains integers, decimal and string value.
#Now delete all decimal values by using any list delete function .
#In resultant list now add 3 character values.

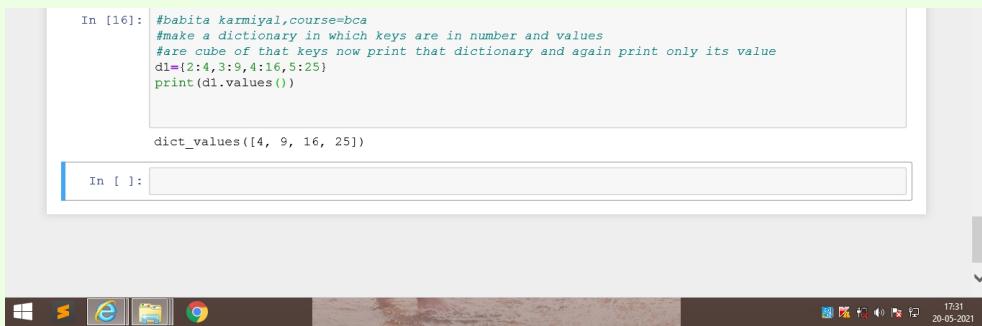
l1=['a','b','c','d',1,2,3,4,1.2,2.4,4.6]
del l1[8:11]
print(l1)
l1.append("e")
print(l1)
l1.append('f')
print(l1)
l1.append('g')
print(l1)
```

['a', 'b', 'c', 'd', 1, 2, 3, 4]  
['a', 'b', 'c', 'd', 1, 2, 3, 4, 'e']  
['a', 'b', 'c', 'd', 1, 2, 3, 4, 'e', 'f']  
['a', 'b', 'c', 'd', 1, 2, 3, 4, 'e', 'f', 'g']

In [ ]:

## Python practical question:4

Make a dictionary in which the keys are the numbers and the values are their cubes. now first print the dictionary and then print the values of the dictionary

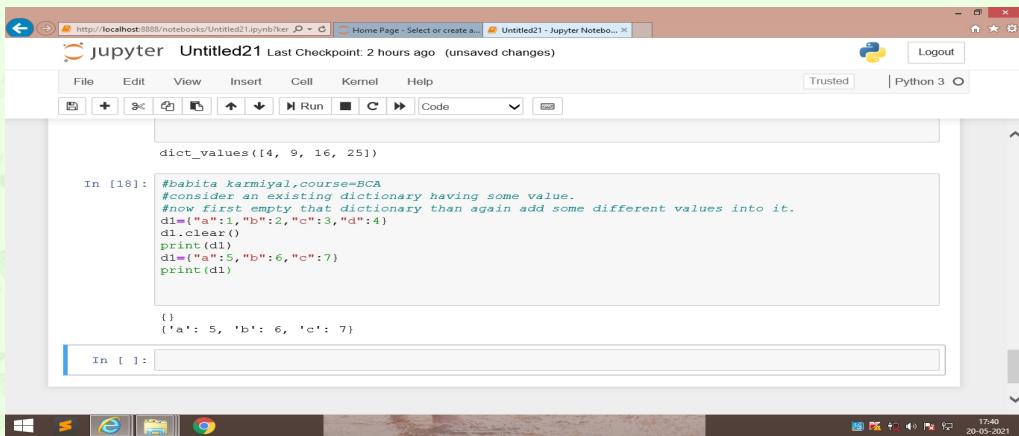


```
In [16]: #babita karmiyal, course=BCA
#make a dictionary in which keys are in number and values
#are cube of that keys now print that dictionary and again print only its value
d1={2:4,3:9,4:16,5:25}
print(d1.values())

dict_values([4, 9, 16, 25])
```

In [ ]:

2. consider an existing dictionary with some existing values. first empty the dictionary and then add some new key-value pairs to it.



```
dict_values([4, 9, 16, 25])

In [18]: #babita karmiyal, course=BCA
#consider an existing dictionary having some value.
#now first empty that dictionary than again add some different values into it.
d1={"a":1,"b":2,"c":3,"d":4}
d1.clear()
print(d1)
d1={"a":5,"b":6,"c":7}
print(d1)

{'a': 5, 'b': 6, 'c': 7}
```

In [ ]:

3. write a python program to check any 5 values that is present in an existing dictionary or not

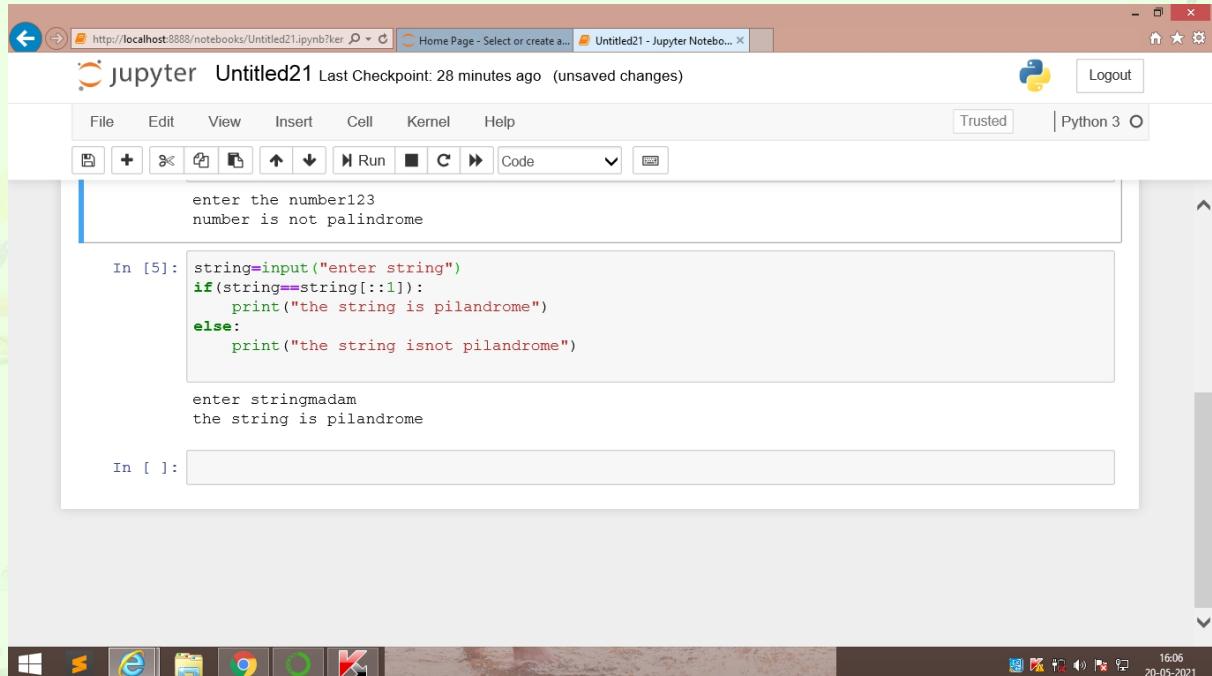
```
In [7]: #name=babita karmiyal ,course=bca
#write a python program to check any 5 value that is present in the dictionary or not
d1={"a":1,"b":2,"c":3,"d":4,"e":5}
print (d1.values())

dict_values([1, 2, 3, 4, 5])
```

```
In [ ]:
```

## Python Practical question.5

1. write a python program to check if the value entered by the user is a palindrome or not



The screenshot shows a Jupyter Notebook window with the following content:

```
enter the number123
number is not palindrome
```

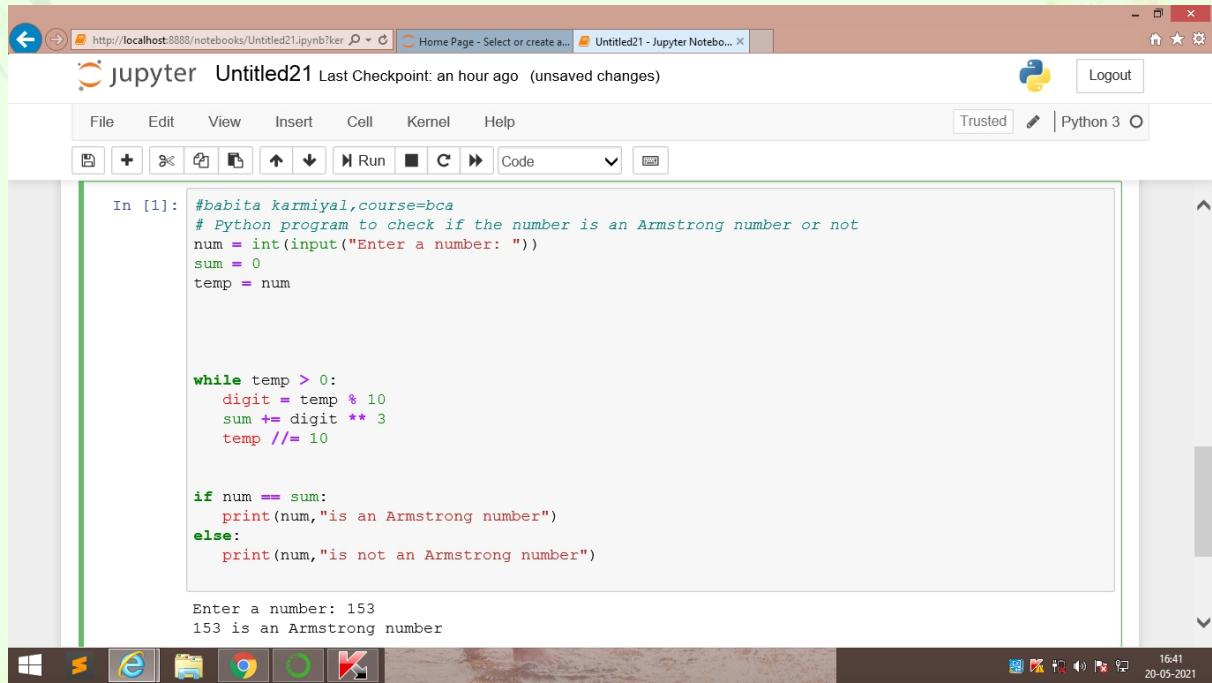
```
In [5]: string=input("enter string")
if(string==string[::-1]):
    print("the string is pilandrome")
else:
    print("the string isnot pilandrome")

enter stringmadam
the string is pilandrome
```

```
In [ ]:
```

The window includes a toolbar with various icons, a menu bar with File, Edit, View, Insert, Cell, Kernel, Help, and a status bar at the bottom showing the date and time.

2. write a python program to check if the value entered by user is a Armstrong number or not



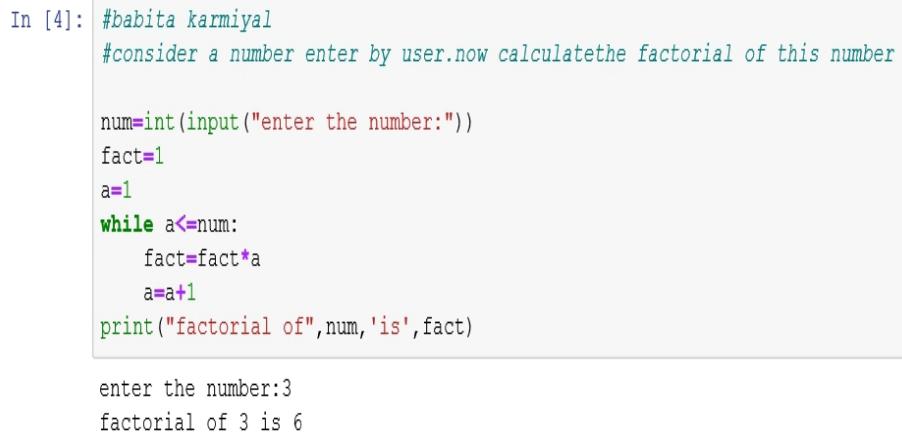
```
In [1]: #babita karmiyal, course=bca
# Python program to check if the number is an Armstrong number or not
num = int(input("Enter a number: "))
sum = 0
temp = num

while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

if num == sum:
    print(num, "is an Armstrong number")
else:
    print(num, "is not an Armstrong number")

Enter a number: 153
153 is an Armstrong number
```

3. consider a number given input by the user . now find the factorial of the number

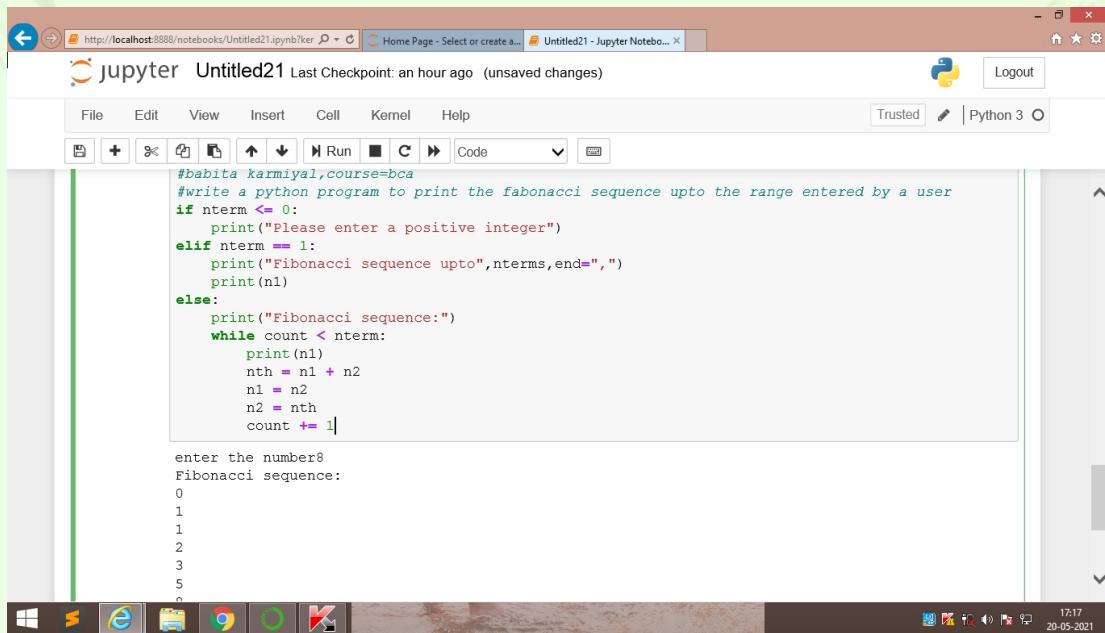


```
In [4]: #babita karmiyal
#consider a number enter by user.now calculate the factorial of this number

num=int(input("enter the number:"))
fact=1
a=1
while a<=num:
    fact=fact*a
    a=a+1
print("factorial of",num,'is',fact)

enter the number:3
factorial of 3 is 6
```

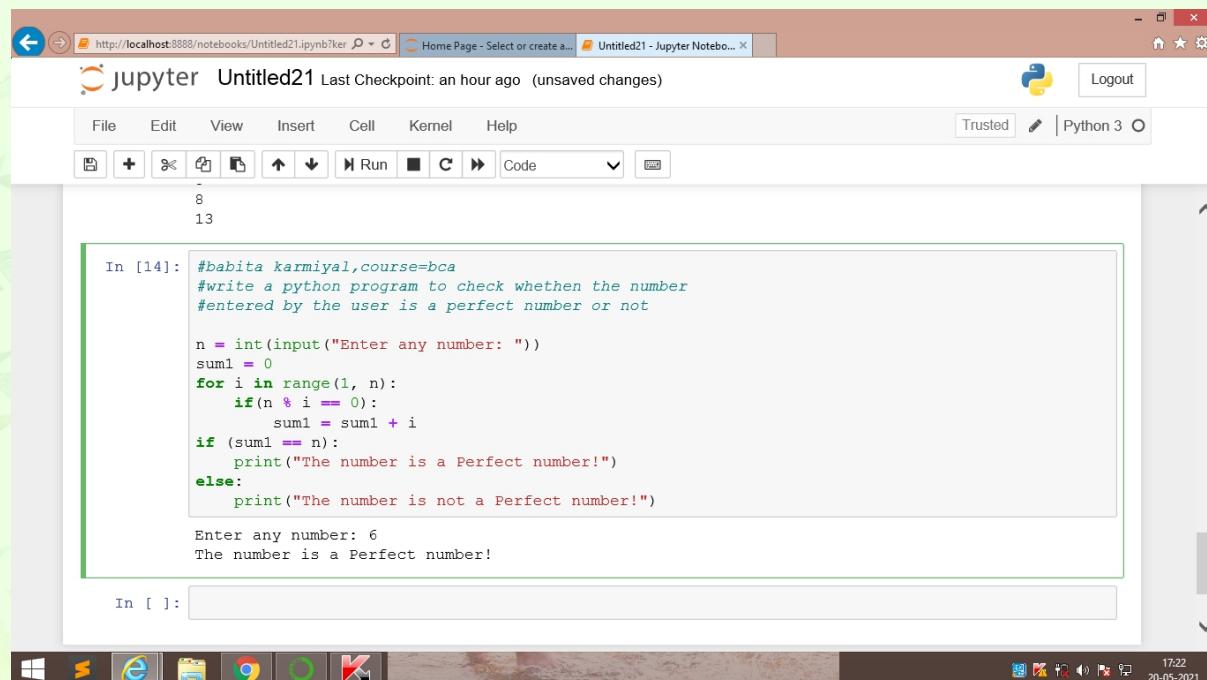
4. Write a python program to print the Fibonacci sequence upto the range given by the user.



```
#babita karmiyal, course=bca
#write a python program to print the fabonacci sequence upto the range entered by a user
if nterm <= 0:
    print("Please enter a positive integer")
elif nterm == 1:
    print("Fibonacci sequence upto", nterms, end=" ")
    print(n1)
else:
    print("Fibonacci sequence:")
    while count < nterm:
        print(n1)
        nth = n1 + n2
        n1 = n2
        n2 = nth
        count += 1

enter the number
Fibonacci sequence:
0
1
1
2
3
5
```

5. write a python program to chck whether th number entered by the user is a perfect number or not



```
#babita karmiyal, course=bca
#write a python program to check whethen the number entered by the user is a perfect number or not

n = int(input("Enter any number: "))
sum1 = 0
for i in range(1, n):
    if(n % i == 0):
        sum1 = sum1 + i
if (sum1 == n):
    print("The number is a Perfect number!")
else:
    print("The number is not a Perfect number!")

Enter any number: 6
The number is a Perfect number!
```

## Python practical question.6

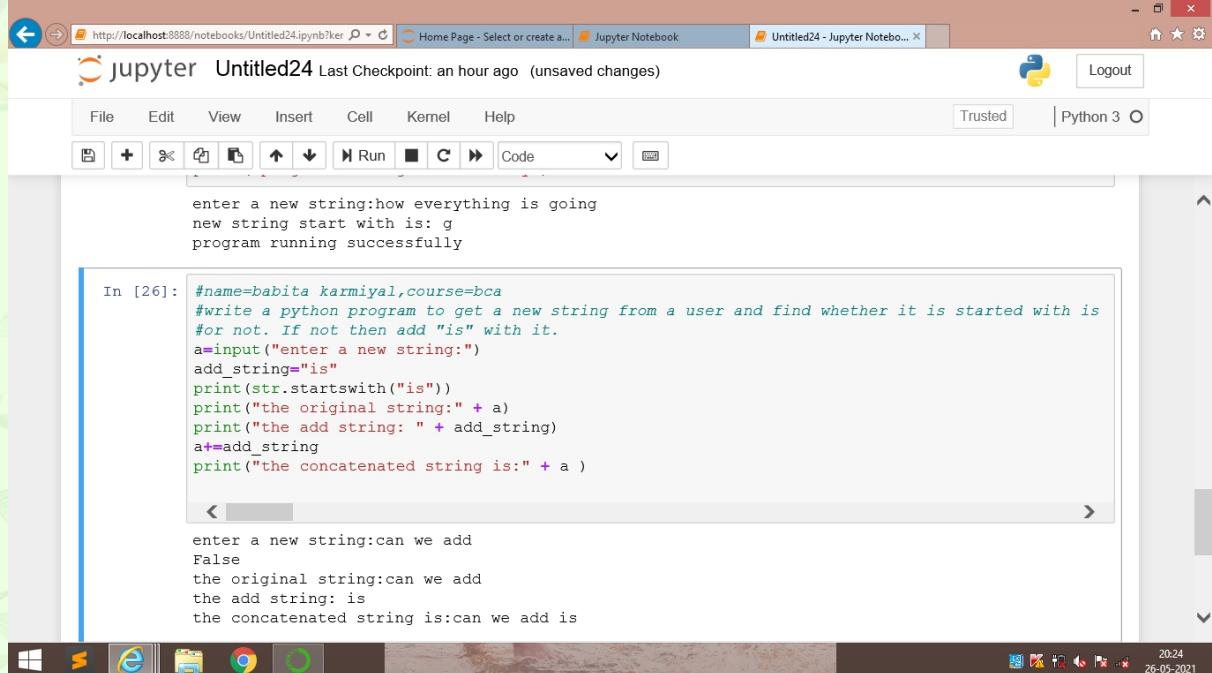
Write a python program to remove duplicate values from a list

```
In [10]: #name=babita karmiyal, course =bca
#python program to print duplicate value from the list

duplicate=[10,20,30,40,50,10]
print(list(set(duplicate)))

[40, 10, 50, 20, 30]
```

2. write a python program to get a string from the user and check if it start with “is” or not. if not then add is with it

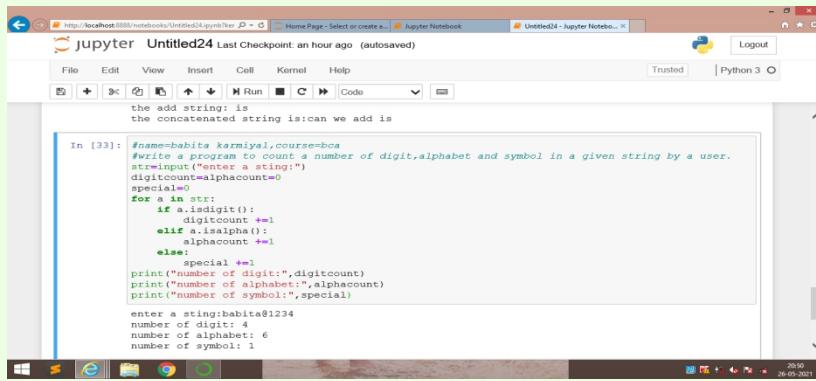


The screenshot shows a Jupyter Notebook interface with the following details:

- Header:** jupyter Untitled24 Last Checkpoint: an hour ago (unsaved changes)
- Toolbar:** File, Edit, View, Insert, Cell, Kernel, Help, Trusted, Python 3
- Output Cell:** enter a new string:how everything is going  
new string start with is: g  
program running successfully
- Code Cell:** In [26]:

```
#name=babita karmiyal, course=bca
#write a python program to get a new string from a user and find whether it is started with is
#or not. If not then add "is" with it.
a=input("enter a new string:")
add_string="is"
print(str.startswith("is"))
print("the original string:" + a)
print("the add string: " + add_string)
a+=add_string
print("the concatenated string is:" + a )
```
- Output Cell:** enter a new string:can we add  
False  
the original string:can we add  
the add string: is  
the concatenated string is:can we add is

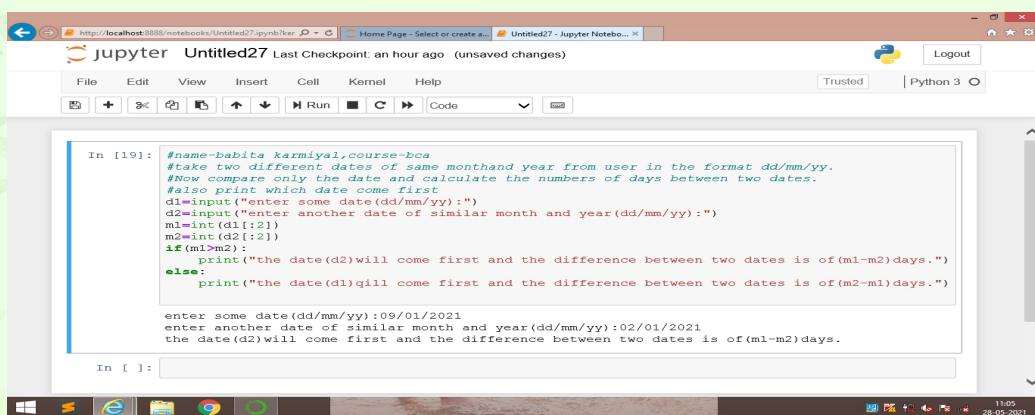
3. write a python program to count the number of alphabets , digits and symbol in the string given by the user



```
#name=habita karmiyal, course=bca
#write a program to count a number of digit,alphabet and symbol in a given string by a user.
str=input("enter a sting:")
digitcount=alphacount=0
special=0
for a in str:
    if a.isdigit():
        digitcount +=1
    elif a.isalpha():
        alphacount +=1
    else:
        special +=1
print("number of digit:",digitcount)
print("number of alphabet:",alphacount)
print("number of symbol:",special)

enter a sting:habita@1234
number of digit: 4
number of alphabet: 6
number of symbol: 1
```

4. take two dates of same months and same year from the user in the format dd/mm/yy. now compare only the dates and calculate the number of days between the two dates and also print which date comes first



```
#name=habita karmiyal, course=bca
#take two different dates of same month and year from user in the format dd/mm/yy.
#Now compare only the date and calculate the numbers of days between two dates.
#also print which date come first
d1=input("enter some date(dd/mm/yy):")
d2=input("enter another date of similar month and year(dd/mm/yy):")
m1=int(d1[1:3])
m2=int(d2[1:3])
if(m1>m2):
    print("the date(d2)will come first and the difference between two dates is of(m1-m2)days.")
else:
    print("the date(d1)will come first and the difference between two dates is of(m2-m1)days.")

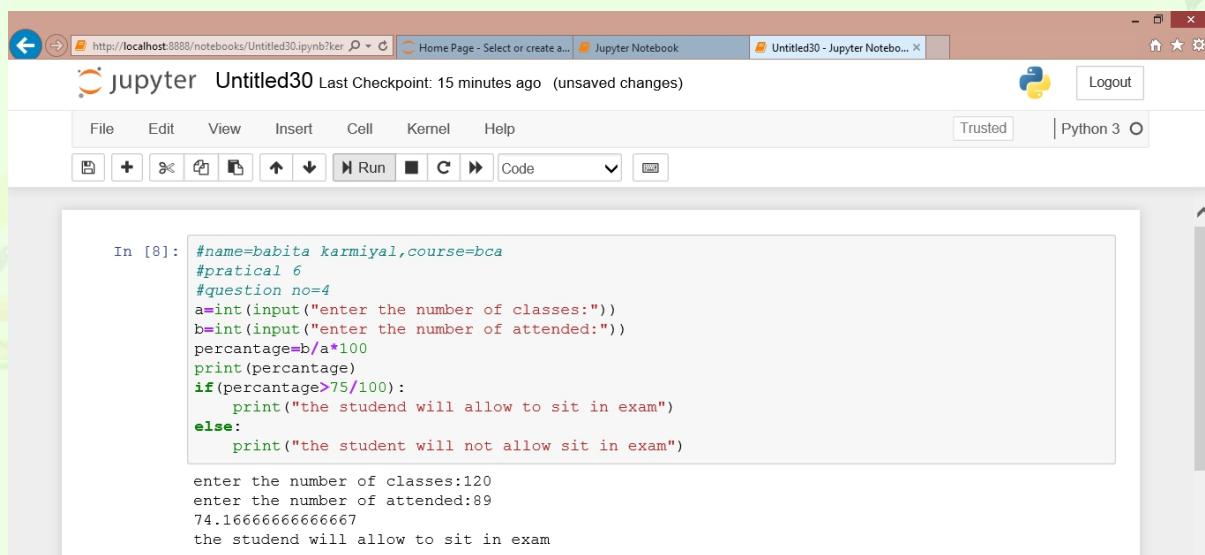
enter some date(dd/mm/yy):09/01/2021
enter another date of similar month and year(dd/mm/yy):02/01/2021
the date(d2)will come first and the difference between two dates is of(m1-m2)days.
```

5. a student is not allowed to sit in exam , if his/her attendance is less than 75%. take following inputs from the user:

a) number of classes held

b) number of classes attended

print the percentage of class attended and also tell if h/she will sit in the exams.



The screenshot shows a Jupyter Notebook interface with the following details:

- Header:** The title bar shows the URL `http://localhost:8888/notebooks/Untitled30.ipynb?ker`, the tab `Home Page - Select or create a...`, and the notebook name `Untitled30 - Jupyter Notebook...`.
- Toolbar:** Standard Jupyter Notebook toolbar buttons for File, Edit, View, Insert, Cell, Kernel, Help, Run, Cell Type, and Code.
- Code Cell:** The code cell content is as follows:

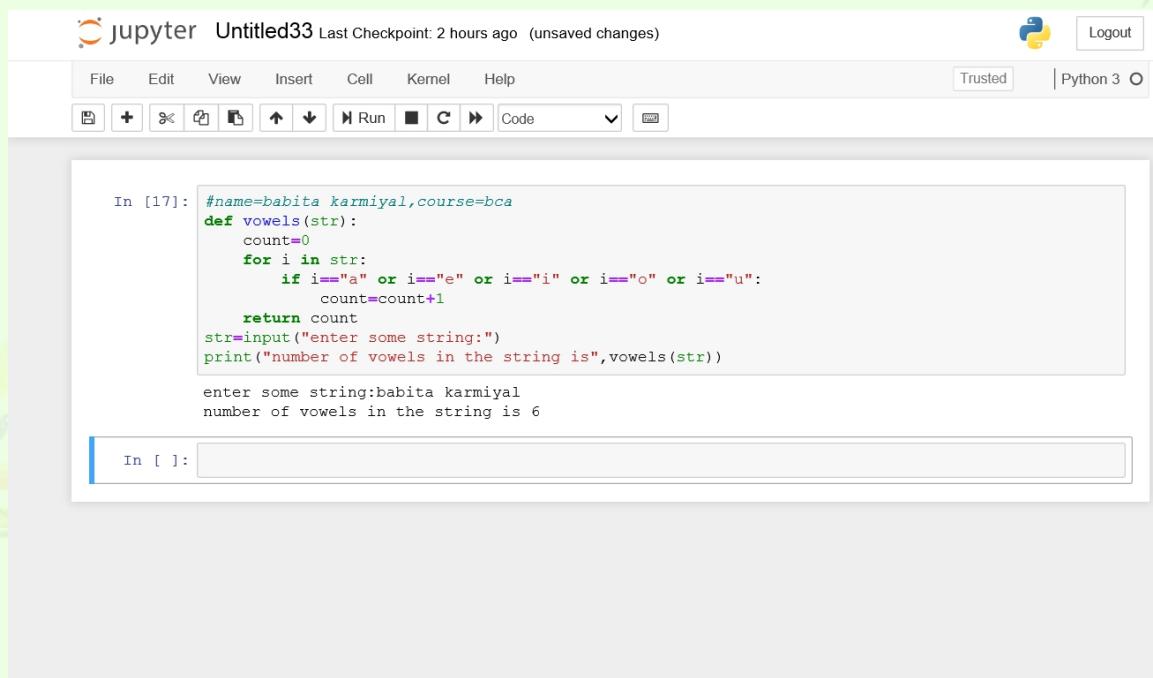
```
In [8]: #name=babita karmiyal, course=bca
#practical 6
#question no=4
a=int(input("enter the number of classes:"))
b=int(input("enter the number of attended:"))
percentage=b/a*100
print(percentage)
if(percentage>75/100):
    print("the student will allow to sit in exam")
else:
    print("the student will not allow sit in exam")
```

Below the code cell, the output of the code is displayed:

```
enter the number of classes:120
enter the number of attended:89
74.16666666666667
the student will not allow sit in exam
```

## python practical question:7

1. write a python program having a user defined function which will calculate the total number of vowels in a string given by the user.



The screenshot shows a Jupyter Notebook interface with a single code cell. The code defines a function `vowels` that takes a string as input and counts the number of vowels ('a', 'e', 'i', 'o', 'u') in it. The cell is run, and the output shows the string "babita karmiyal" and the count "6".

```
In [17]: #name=babita karmiyal, course=bca
def vowels(str):
    count=0
    for i in str:
        if i=="a" or i=="e" or i=="i" or i=="o" or i=="u":
            count=count+1
    return count
str=input("Enter some string:")
print("number of vowels in the string is",vowels(str))

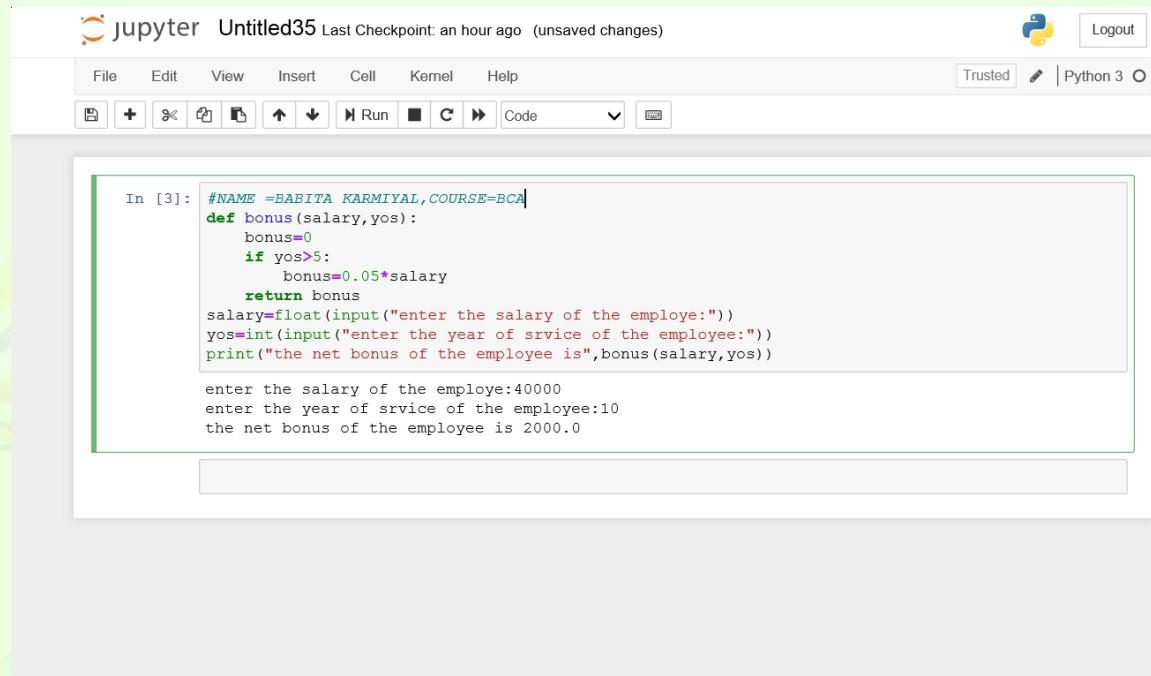
enter some string:babita karmiyal
number of vowels in the string is 6
```

2. a shop will give discount of 10% if the cost of the purchased quantity is more then 1000 rupees. now write a python on program having a user defined function which will first calculate whether the purchased quantity is more then 1000 rupees or not and then accordingly it will print the total cost for the user.

```
In [2]: #babita karmiyal, course=bca
def totalcost(cost):
    if (cost>1000):
        cost=0.9*cost
    return cost
cost=int(input("enter the cost of purchased quantity for the customer:"))
print("the total cost after calculating the discount:",totalcost(cost))

enter the cost of purchased quantity for the customer:1230
the total cost after calculating the discount: 1107.0
```

3. suppose a company dcided to give a bonus of 5% to their employee if his /her year of service in the company is more than 5 year. now rite a python program having a usr define function which will print the net bonus amount . ask user to input the salary and the year of service



```
In [3]: #NAME =BABITA KARMIYAL,COURSE=BCA
def bonus(salary,yos):
    bonus=0
    if yos>5:
        bonus=0.05*salary
    return bonus
salary=float(input("enter the salary of the employee:"))
yos=int(input("enter the year of srvice of the employee:"))
print("the net bonus of the employee is",bonus(salary,yos))

enter the salary of the employee:40000
enter the year of srvice of the employee:10
the net bonus of the employee is 2000.0
```

