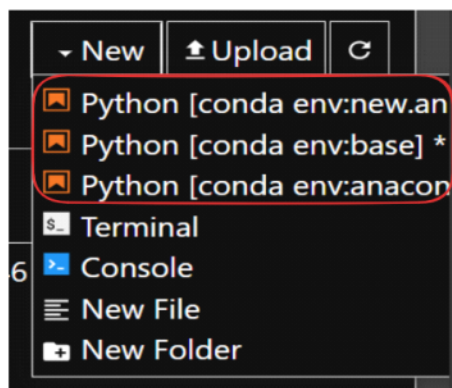
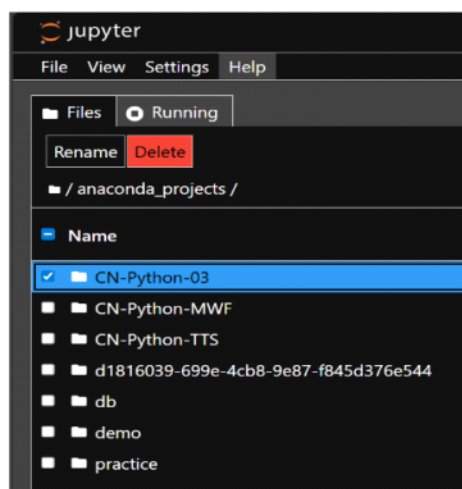
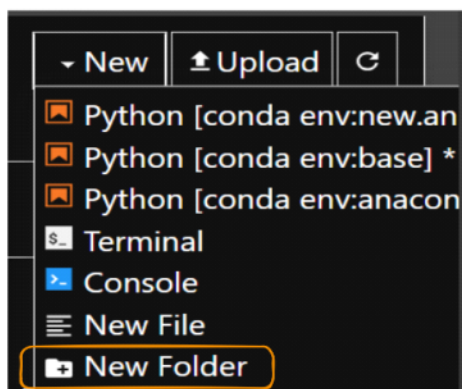


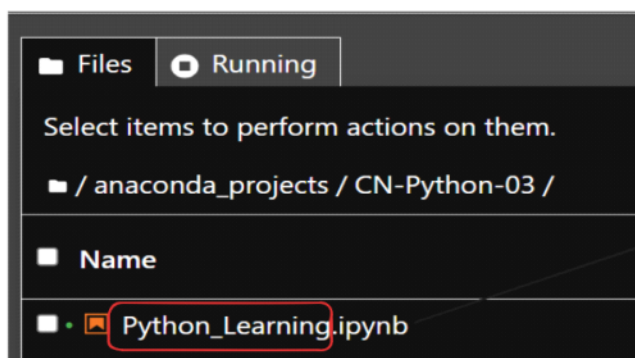
Introduction to Python-II

Session Objectives:

- Understand the basic syntax of Python.
- Learn about variables and their usage.
- 📌 Declare and assign values to variables.
- 🧩 Differentiate between variables, identifiers, and keywords.
- 🔧 Explore data types, check them, and perform type conversion.



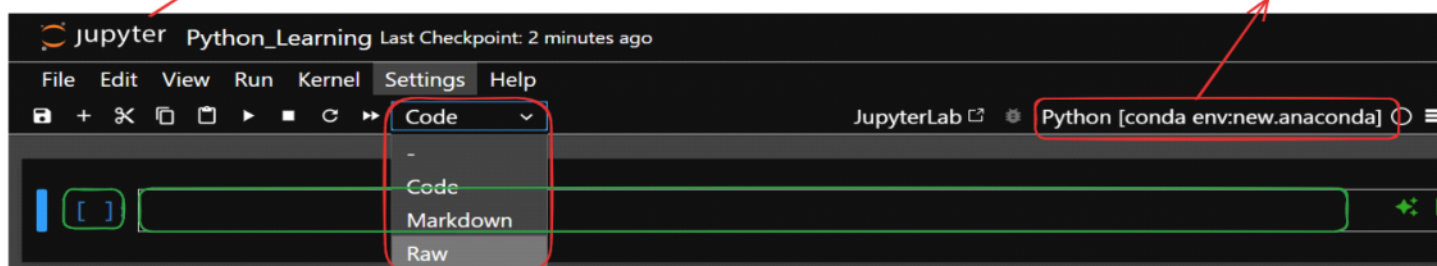
Kernal [.ipynb]



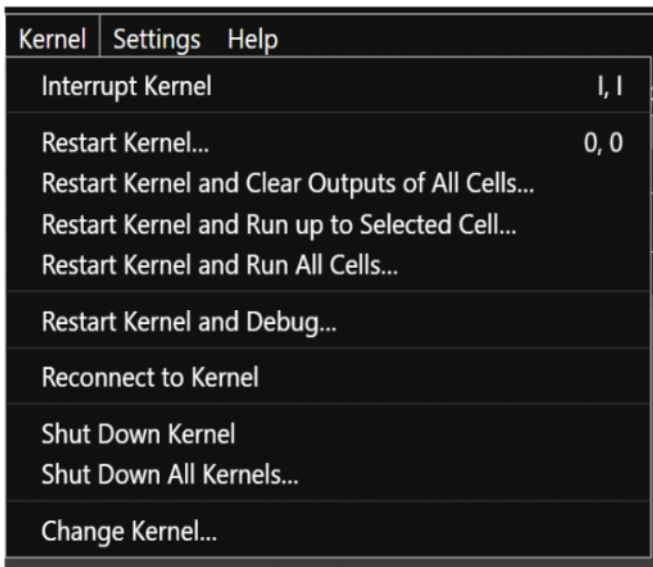
ipython notebook

IDE

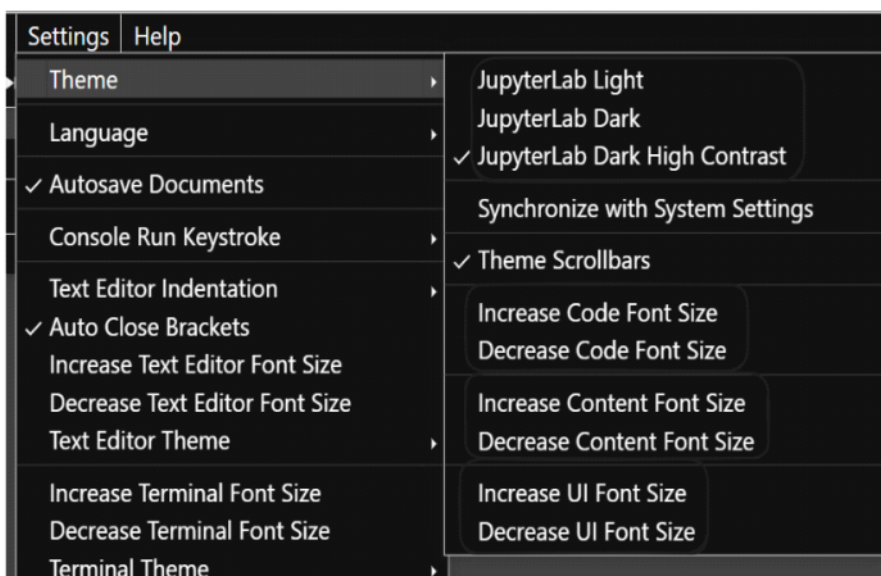
Interpreter



localhost:8888/notebooks/anaconda_projects%2FCN-Python-03%2FPython_Learning.ipynb



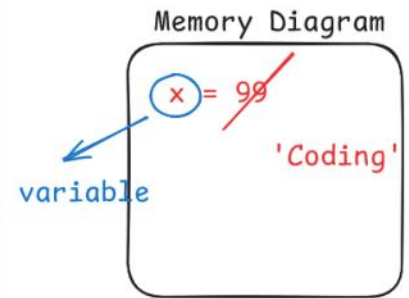
.md -> markdown



Comment [Single Line Comment]

```
# Variable -> is a container which stores data in it.
# [Python] -> variable auto detects the data type
x = 99
print(x)           Top to Bottom
print(type(x)) # What data type 'x' stores ['int']
99
<class 'int'>

x = 'Coding'
print(x) # 99 it is updated to 'Coding'
print(type(x)) # 'string' type , '' or ""
Coding
<class 'str'>
```



Console [Output]

```
99      'Coding'
'int'   'str'
```

```
# Java
int x = 10
System.out.println(x)
String x = 'Coding'
System.out.println(x)
```

Raw File

```
x = 'X' # char
print(x)
print(type(x)) # 'str'
X
<class 'str'>
```

```
x = int('21') + 1
print(x) # 22
print(type(x)) # 'int'
22
<class 'int'>
```

```
x = 99.99
print(x)
print(type(x))
99.99
<class 'float'>
```

```
x = 11 + 9j
print(x)
print(type(x))
(11+9j)
<class 'complex'>
```

```
x = True
print(x)
print(type(x)) # 'bool'
True
<class 'bool'>
```

```
# INSERT INTO Customers(customer_id, customer_name , customer_phone) -> parameters
# VALUES ('K0191' , 'Akancha Ranjan', 04727678627) -> arguments
# print [Function -> argument [end,sep]]
print('Python') \n
print('Programming')
```

```
Python
Programming
```

```
# By Default end = '\n' [which moves the content to the next line]
print('Python', end = ' ')
print('Programming')
print("Coding is Awesome 🚀")
```

```
Python Programming
Coding is Awesome 🚀
```

Win + ':' [To open a emoji keyboard]

```
print('Python', end = '\t') # tab like space
print('Programming')
Python Programming

# car_list = ['Creta', 'Safari', 'Sierra', 'Harrier', 'Duster'] ', ' [Sept]
print('Mon', 'Tues', 'Wed', 'Thurs', 'Fri')
Mon Tues Wed Thurs Fri

print('Mon', 'Tues', 'Wed', 'Thurs', 'Fri', sep = ' - ')
Mon - Tues - Wed - Thurs - Fri
```

Input

facebook

Facebook helps you connect and share with the people in your life.

Log in

[Forgotten password?](#)

Create new account

Input() : ¶

Used to accept user input from the keyboard as a string which can be type cast as per the requirement.

```
user_name = input("Enter your UserName") # String
print(user_name)
```

Enter your UserName User Defined
UltimareForce

```
user_name = input("Enter your UserName") # String
print(user_name)
```

Enter your UserName
PardhanJi

Memory Diagram

user_name = ~~None~~
UltimateForce

```
# TypeCasting
```

```
val = input("Enter the Value : ") # String
print(val)
print(type(val)) # 'str'
```

```
Enter the Value : 21
21
<class 'str'>
```

```
val = int(input("Enter the Value : ")) # Int int('21') 21
print(val)
print(type(val))
```

```
Enter the Value : 21
21
<class 'int'>
```

```
# Operations [Arithmetic Operators]
```

```
val = int(input("Enter the Value : "))
print(val * 5)
print(type(val))
```

```
Enter the Value : 11
55
<class 'int'>
```

```
val = input("Enter the Value : ")
print(val * 5)
print(type(val))
```

```
Enter the Value : 11
1111111111
<class 'str'>
```

```
val = input("Enter the Value : ")
print(val * 5)
print(type(val))
```

```
Enter the Value : a
aaaaa
<class 'str'>
```

```
val = input("Enter the Value : ")
print(val + '11')
print(type(val))
```

```
Enter the Value : 11
1111
<class 'str'>
```

```
x = int(input("Enter a number between 1 to 100:"))
x = x + 11
print(x)
```

```
Enter a number between 1 to 100: 66
77
```

Check_Constraints -> Error Handling ['Raise'] [Try/Catch]

```
# String Pattern
# F-String
user_name = input("Enter the UserName : ")
designation = input('Enter Your Designation : ')
print(f"Hey , {user_name}! Welcome to the Team. You are hired as a {designation} role.")
```

```
Enter the UserName : Abhishek
Enter Your Designation : Senior Analyst
Hey , Abhishek! Welcome to the Team. You are hired as a Senior Analyst role.
```

```
# String Pattern
# F-String
user_name = input("Enter the UserName : ")
designation = input('Enter Your Designation : ')
print(f"Hey , {user_name}! Welcome to the Team. You are hired as a {designation} role.")
```

```
Enter the UserName : Annu Mishra
Enter Your Designation : Data Architect
Hey , Annu Mishra! Welcome to the Team. You are hired as a Data Architect role.
```

```
# MultiLine Comments
'''
    This is a multiline Comments .....
    Put the important Stuff here relevant
    to your python Programming
'''
print('Hi, Everyone!')
```

```
Hi, Everyone!
```

```
num1 = int(input("Enter the First_Value: "))
num2 = int(input("Enter the Second_Value: "))
result = num1 * num2
print("The final Result is : " , result)
print(f"The final Result is : {result}")
```

```
Enter the First_Value: 22
Enter the Second_Value: 15
The final Result is : 330
The final Result is : 330
```

Memory Diagram

```
num1 = None 22
num2 = None 15
result = None 330
```

Console:

```
The final Result is : 330
The final Result is : 330
```

```
num1 = int(input("Enter the First_Value: "))
num2 = int(input("Enter the Second_Value: "))
result = num1 * num2
print("The final Result is : " , result)
print(f"The final Result is : {result + 10}")
```

```
Enter the First_Value: 5
Enter the Second_Value: 16
The final Result is : 80
The final Result is : 90
```

```
print(result)
```

```
80
```

Invoice Billing

```
item1 = float(input("Enter the price of Item1: "))
item2 = float(input("Enter the price of Item2: "))
item3 = float(input("Enter the price of Item3: "))
item4 = float(input("Enter the price of Item4: "))
item5 = float(input("Enter the price of Item5: "))
billing_amount = item1 + item2 + item3 + item4 + item5
gst_tax = billing_amount * 0.05
total_payment = billing_amount + gst_tax
print("Welcome Customer!, You final billing amount is" , total_payment)
print(f"Welcome Customer!, You final billing amount is {total_payment}" )
```

```
Enter the price of Item1: 99.99
Enter the price of Item2: 129.99
Enter the price of Item3: 499.99
Enter the price of Item4: 59.87
Enter the price of Item5: 83.55
Welcome Customer!, You final billing amount is 917.0595
Welcome Customer!, You final billing amount is 917.0595
```

```
print(billing_amount)
```

873.39

```
print(gst_tax)
```

43.6695

```
print(873.39 + 43.6695)
```

917.0595