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# MOHIT DESHMUKH (0827CI201108)
# indentation example
 Branch = ‘CSIT’ if branch == ‘CSIT’:
   Print(‘Welcome to CSIT’) else:
   Print(‘Other branch’) print(‘All set !’)

# MOHIT DESHMUKH (0827CI201108)
 Print(‘This is python code’)
# this is single line comment
“””
This is a multiline comment in Python that spans several lines. This application is a Computer Science portal for geeks.
“””

# MOHIT DESHMUKH (0827CI201108)
# if else example
#if-else
Num = 100:
If num==100:
   Print(‘num is 100’)

Else:
   Print(‘num is not 100’)

#nested if-else
If num<=100:
    If num<=50:
       Print(“number is between 0 to 50”)
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    Else:
        Print("number is between 50 to 100")

Else:
   Print('number is above 100')

#if elif else

If num==100:
    Print("number is 100")

Elif num==200:
      Print('number is 200')

Elif num==300:
      Print('number is 300')

Else:
    Print('number something else')

# MOHIT DESHMUKH (0827CI201108)
#List Data structure
Fruits = ['mango','apple',1000,'banana','orange',True,58.50]
Print(fruits)                    #print list print('element at index
3 '+fruits[3])  #access element using index value print('length of list
',len(fruits))    #print length of list fruits.append(2020.55);
#append to the list fruits.insert(2,False);              #insert at
Index 2 fruits.extend([8,'potato']);
#insert at end fruits.reverse();
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Fruits.remove(‘apple’); fruits.pop(3); #remove at index 3 fruits.clear();

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myTuple = (‘banana’, ‘apple’, ‘orange’, ‘pineapple’);

#creating tuple using tuple constructor myTuple =

Tuple((‘banana’, ‘apple’, ‘orange’, ‘pineapple’))

Print(myTuple) print(‘length of tuple : ‘,len(myTuple)); #length of

Tuple print(‘element at 2 ‘,myTuple[2]); #access element using

Indexing print(myTuple[1:3]) #slicing from index

1 to 2 print(myTuple.count(‘banana’)) #count occurrence of

Banana print(‘banana’ in myTuple) # print true if present mylist = [‘banana’, ‘apple’, ‘orange’, ‘pineapple’];

convertedTuple = tuple(mylist); #convert list into tuple

fruits.sort(); #only work on same type of values in list print(fruits);

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#string data structure

Str = ‘Welcome to the CSIT Department’ print(str[0]) #accessing using index print(str.capitalize())

#capitalize the string print(‘’.join(reversed(str))) #reverse the string print(str[2:8])

#string slicing print(list(str)) #convert string to list del str

#delete entire string String1 = “{1} {0} {2}”.format(‘Geeks’, ‘For’, ‘Life’) print(str.count(‘to’)) #count the word to print(str.split(‘the’))

#split into list based on word ‘the’ print(str.upper()) #convert into uppercase print(str.lower())

#convert into lowercase print(str.find(‘the’)) #return the starting index of ‘the’ print(str.index(‘to’)) #return the index of ‘to’

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#Dictionary data structure

myDict = {100:’Pooja’ ,

200:’Mokshi’,300:’Harshit’,400:’Manas’,500:’Prachi’,600:’Abhi’}; print(myDict)

Print(myDict.get(400)) #get value using key

Print(myDict.values()) #prints only values

Print(myDict.keys()) #prints only keys

Print(myDict.pop(400)) #pop item which has key 400

Print(myDict.popitem()) #pop last item

Del(myDict[100]) #delete item which has key 100

myDict.update({10000:”Gitu”}) #add new element at last

print(myDict.__sizeof__())

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#lamda function

Square = lambda x:x*2

List = [1,2,3,4,5,6,7,8] newList = list(map(square , List)) print(newList)

MOHIT DESHMUKH (0827CI201108)

#class and object

#declaring class student class Student:

Def __init__(self, name, age, grade):

Self.name = name self.age = age self.grade = grade

Def details(self):

Print(‘name is : ‘,self.name) print(‘age is : ‘,self.age) print(‘grade is : ‘,self.grade)

Def get_name(self): return self.name

Def get_age(self): return self.age

Def get_grade(self): return self.grade

Def set_name(self, name):

Self.name = name

Def set_age(self, age):

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        Self.age = age
         Def set_grade(self, grade):
        Self.grade = grade

#initializing object s1      s1 = Student('kuldeep',20,92) s1.details()
```