MASTERCLASS (05_OCT_2021)

In [12]:
```
a=256
b=256
print(id(a))
print(id(b))
a is b
```

```
140728917772048
140728917772048
```

Out[12]: True

In [13]:
```
a=-5
b=-5
print(id(a))
print(id(b))
a is b
```

```
140728917763696
140728917763696
```

Out[13]: True

In [4]:
```
a=257           #memory address is not same bcu'z only form -5 to 256 is valid
b=257
print(id(a))
print(id(b))
a is b
```

```
2239159013616
2239159014672
```

Out[4]: False

In [7]:
```
a=-6           #memory address is not same bcu'z only form -5 to 256 is valid
b=-6
print(id(a))
print(id(b))
a is b
```

```
2239159014512
2239159014960
```

Out[7]: False

In [8]:
```
a=256
b=256
print(id(a))
print(id(b))
a is b
```

```
140728917772048
140728917772048
```

Out[8]: True

In [10]:
```
a=-65          #memory address is not same bcu'z only form -5 to 256 is valid
b=-65
print(id(a))
print(id(b))
```

```
a is b
```

```
2239159014576
2239159015184
```

Out[10]: False

In [11]:
```
a=300
b=300
c=300
print(id(a))   #same process (memory adderss are'nt same)
print(id(b))
print(id(c))
```

```
2239159014704
2239159015120
2239159015312
```

In [15]:
```
# STRINGS

a = "Raushan Raj"
print(a[1])
```

```
a
```

In [17]:
```
a = "Raushan Raj"
print(a[4])
```

```
h
```

In [16]:
```
a[1]='p'   #strings are immutable
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-16-f222d1ea338c> in <module>
----> 1 a[1]='p'   #strings are immutable

TypeError: 'str' object does not support item assignment
```

In [18]:
```
a='great'
print(a)
print(id(a))
```

```
great
2239159899632
```

In [20]:
```
del a[1]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-20-d982d7dc2a95> in <module>
----> 1 del a[1]

TypeError: 'str' object doesn't support item deletion
```

In [21]:
```
del a

print(a)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-21-36eb63552b80> in <module>
```

```
      1 del a
      2
----> 3 print(a)

NameError: name 'a' is not defined
```

In [23]:

```
string1 = 'I\'m a "Teacher"'
print(string1)

string1 = "I'm a \"Teacher\""
print(string1)

string1 = "C:\\MyComputer\\python\\"
print(string1)
```

```
I'm a "Teacher"
I'm a "Teacher"
C:\MyComputer\python\
```

In [24]:

```
string1 = 'I\'m a "Teacher"'
print(string1)

string1 = "I'm a \"Teacher\""
print(string1)

string1 = "C:\\MyComputer\\python\\"
print(string1)
```

```
I'm a "Teacher"
Teacher"
C:\MyComputer\python\
```

In [25]:

```
string1 = 'I\'m a "Teacher"'
print(string1)

string1 = "\"Teacher\""
print(string1)

string1 = "C:\\MyComputer\\python\\"
print(string1)
```

```
I'm a "Teacher"
"Teacher"
C:\MyComputer\python\
```

In [28]:

```
string1 = "This is \x63\x73\x65"
print(string1)

string1 = r"This is \x63\x73\x65"
print(string1)
```

```
This is cse
This is \x63\x73\x65
```

In [30]:

```
string1 = "{} {} {}".format('chitkara', 'CSE', 'University')
print(string1)

# Positional Formating
string1 = "{1} {0} {2}".format('Chitkara', 'CSE', 'University')
print(string1)

# Keyword Formatting
string1 = "{d} {c} {e}".format(d='chitkara', c='CSE', e='University')
print(string1)
```

```
chitkara CSE University
CSE Chitkara University
chitkara CSE University
```

In [31]:
```
string1 = "{} {} {}".format('chitkara', 'CSE', 'University')
print(string1)

# Positional Formating
string1 = "{1} {0} {0}".format('Chitkara', 'CSE', 'University')
print(string1)

# Keyword Formatting
string1 = "{d} {c} {e}".format(d='chitkara', c='CSE', e='University')
print(string1)
```

```
chitkara CSE University
CSE Chitkara Chitkara
chitkara CSE University
```

In [33]:
```
for a in "Chitkara":
    print(a,end="  ")
```

```
C  h  i  t  k  a  r  a
```

In [34]:
```
a="CSE First year"
print(len(a))
```

```
14
```

In [35]:
```
for a in "Chitkara":
    print(a,end="???")
```

```
C???h???i???t???k???a???r???a???
```

In [39]:
```
for ch in "Chitkara":
    if ch!='a':
        print(ch,end="  ")
```

```
C  h  i  t  k  r
```

In [40]:
```
a="CSE Chitkara"
print(len(a))
```

```
12
```

In [45]:
```
sentence="CSE First year"
if "cse" in sentence:
    print("present")
else:
    print("absent")
```

```
absent
```

In [46]:
```
a="CSE First year"
print(a[2:9])
```

```
E First
```

In [48]:
```
sentance="CSE First year"
print(sentance[2:5])
```

```
E F
```

In [50]:
```
a="CSE First year"
print(a[-5:-2])
```

```
 ye
```

In [51]:
```
a="CSE First year"
print(a[-7:-2])
```

```
st ye
```

In [52]:
```
a="CSE First"
print(a.upper())
```

```
CSE FIRST
```

In [53]:
```
a="CSE First"
print(a.lower())
```

```
cse first
```

In [54]:
```
a="CSE first"
print(a.replace("S","A"))
```

```
CAE first
```

In [60]:
```
a="CSE FirSt"
print(a.split(" "))
```

```
['CSE', 'FirSt']
```

In [61]:
```
a="CSE.First.Year.DoinGreat"
print(a.split("."))
```

```
['CSE', 'First', 'Year', 'DoinGreat']
```

In [62]:
```
# Concatention
a="CSE"
b="First"
c=a+b
print(c)
```

```
CSEFirst
```

In [63]:
```
a="CSE"
b="First"
c=a+ " " + b
print(c)
```

```
CSE First
```

In [64]:
```
result=2021
print("CSE First year" + result)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-64-0c010f86504a> in <module>
```

```
      1 result=2021
----> 2 print("CSE First year" + result)

TypeError: can only concatenate str (not "int") to str
```

In [65]:
```
result=2021
print("CSE First year {}".format(result))
```

```
CSE First year 2021
```

In [71]:
```
result=2021
print("CSE First year {1}".format(result))
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-71-81a4032d6eec> in <module>
      1 result=2021
----> 2 print("CSE First year {1}".format(result))

IndexError: Replacement index 1 out of range for positional args tuple
```

In [72]:
```
txt  = "CSE First Year"

x = txt.find("Y")

print(x)
```

```
10
```

In [74]:
```
txt  = "CSE FIRST YEAR"

x = txt.find("E")

print(x)
```

```
2
```

In [76]:
```
txt = "CSE First Year"
x = txt.isalpha()

print(x)
```

```
False
```

In [77]:
```
txt = "CSE First Year123"
x = txt.isalpha()

print(x)
```

```
False
```

In [78]:
```
txt = "CSEFirstYear"
x = txt.isalpha()

print(x)
```

```
True
```

In [79]:
```
txt = "CSEFirstYear123"
x = txt.isalpha()
```

```
print(x)
```

```
False
```

In [81]:

```
txt = "CSEFirstYear123"
x = txt.isalnum()

print(x)
```

```
True
```

In [83]:

```
txt = "CSE#FirstYear123"
x = txt.isalnum()

print(x)
```

```
False
```

In [ ]:

```
  >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>"RAUSHAN RAJ"<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
    DATE-05 OCT 2021
```