```
In [1]: print("STRING EXAMPLE")
        varA = "THIS IS SHARMIN AKHTER."
        varB = 'RIGHT NOW IM DOING MY HOME WORK.'

        print(varA)
        print(varB)
        print("TODAY IS 26 JUNE, 2023.")
```

```
STRING EXAMPLE
THIS IS SHARMIN AKHTER.
RIGHT NOW IM DOING MY HOME WORK.
TODAY IS 26 JUNE, 2023.
```

```
In [2]: print("MULTIPLE LINE STRING EXAMPLE")
        varA = """HI! I'M SHARMIN AKHTER.
        I'M WRITING ON LINE LINE.
        THIS IS MY LAST LINE"""
        print(varA)
```

```
MULTIPLE LINE STRING EXAMPLE
HI! I'M SHARMIN AKHTER.
I'M WRITING ON LINE LINE.
THIS IS MY LAST LINE
```

```
In [3]: print("ACCESSING CHARCTER USING INDEX WITHIN STRING ")
        varA = "THIS IS SHARMIN AKHTER."
        print("The value of index[0] = ",varA[0])
        print("The value of index[0] = ",varA[8])
        print("The value of index[0] = ",varA[9])
        print("The value of index[0] = ",varA[10])
        print("The value of index[0] = ",varA[11])
        print("The value of index[0] = ",varA[12])
        print("The value of index[0] = ",varA[13])
        print("The value of index[0] = ",varA[14])
```

```
ACCESSING CHARCTER USING INDEX WITHIN STRING
The value of index[0] =  T
The value of index[0] =  S
The value of index[0] =  H
The value of index[0] =  A
The value of index[0] =  R
The value of index[0] =  M
The value of index[0] =  I
The value of index[0] =  N
```

```
In [4]: print("STRING WITH FOR IN LOOP")
        varA = "HI! I'M SHARMIN AKHTER."
        for i in varA:
            print(i)
```

```
STRING WITH FOR IN LOOP
H
I
!

I
'
M

S
H
A
R
M
I
N

A
K
H
T
E
R
.
```

In [5]:
```python
print("STRING WITH FOR IN LOOP")
varA = "HI! I'M SHARMIN AKHTER."
for i in varA:
    print(i,i)
```

```
STRING WITH FOR IN LOOP
H H
I I
! !

I I
' '
M M

S S
H H
A A
R R
M M
I I
N N

A A
K K
H H
T T
E E
R R
. .
```

In [6]:
```python
print("LENGTH OF STRING")
varA = "HI! I'M SHARMIN AKHTER."
print(len(varA))
```

```
LENGTH OF STRING
23
```

In [7]:
```python
print("SUB - STRING CHECKING")
varA = "HI! I'M SHARMIN AKHTER."
sub_str = "SHARMIN"
if sub_str in varA:
    print("'SHARMIN' IS EXIST IN THE STRING.")
```

```
SUB - STRING CHECKING
'SHARMIN' IS EXIST IN THE STRING.
```

In [8]:
```python
print("SUB - STRING CHECKING")
varA = "HI! I'M SHARMIN AKHTER."
sub_str = "sharmin"
if sub_str in varA:
    print("'SHARMIN' IS EXIST IN THE STRING.")
print("IF EXISTANCE MESSAGE HAS NOT SHOWN , IT MEANS SUB STRING IS NOT EXIST.
```

```
SUB - STRING CHECKING
IF EXISTANCE MESSAGE HAS NOT SHOWN , IT MEANS SUB STRING IS NOT EXIST.
```

In [9]:
```python
print("SUB - STRING CHECKING WITH (NOT IN)")
varA = "HI! I'M SHARMIN AKHTER."
sub_str = "sharmin"
if sub_str not in varA:
    print(sub_str, " IS NOT EXIST IN THE STRING.")
print("IF EXISTANCE MESSAGE HAS SHOWN , IT MEANS SUB STRING IS NOT EXIST. ")
```

```
SUB - STRING CHECKING WITH (NOT IN)
sharmin  IS NOT EXIST IN THE STRING.
IF EXISTANCE MESSAGE HAS SHOWN , IT MEANS SUB STRING IS NOT EXIST.
```

In [10]:
```python
print("SUB - STRING CHECKING WITH (IN & NOT IN)")
varA = "HI! I'M SHARMIN AKHTER."
sub_str = "sharmin"
print("THE GIVEN STRING IS - ", varA )
if sub_str in varA:
    print(sub_str, " IS EXIST IN THE STRING.")
if sub_str not in varA:
    print("'",sub_str,"' IS NOT EXIST IN THE STRING.")
```

```
SUB - STRING CHECKING WITH (IN & NOT IN)
THE GIVEN STRING IS -  HI! I'M SHARMIN AKHTER.
' sharmin ' IS NOT EXIST IN THE STRING.
```

In [11]:
```python
print("SUB - STRING CHECKING WITH (IN & NOT IN)")
varA = "HI! I'M SHARMIN AKHTER."
sub_str = "SHARMIN"
print("THE GIVEN STRING IS - ", varA )
if sub_str in varA:
    print("'",sub_str, "' IS EXIST IN THE STRING.")
if sub_str not in varA:
    print("'",sub_str,"' IS NOT EXIST IN THE STRING.")
```

```
SUB - STRING CHECKING WITH (IN & NOT IN)
THE GIVEN STRING IS -  HI! I'M SHARMIN AKHTER.
' SHARMIN ' IS EXIST IN THE STRING.
```

In [9]:
```python
print("SLICING STRINGS")
varA = "HI! I'M SHARMIN AKHTER."
print("THE GIVEN STRING IS - ", varA )
print("THE SLICE (varA[4:15]) OF ABOVE STRING IS = ",varA[4:15])
print("THE SLICE FROM START TO 15 (varA[:15]) OF ABOVE STRING IS =  ",varA[:15]
print("THE SLICE START FROM 4 TO END (varA[4:]) OF ABOVE STRING IS =  ",varA[4
print("THE SLICE OF NEGATIVE INDEXING (varA[-5]) OF ABOVE STRING IS =  ",varA[
print("THE SLICE OF NEGATIVE INDEXING (varA[-15:-8]) OF ABOVE STRING IS =  ",va
```

```
SLICING STRINGS
THE GIVEN STRING IS -  HI! I'M SHARMIN AKHTER.
THE SLICE (varA[4:15]) OF ABOVE STRING IS =  I'M SHARMIN
THE SLICE FROM START TO 15 (varA[:15]) OF ABOVE STRING IS =    HI! I'M SHARMIN
THE SLICE START FROM 4 TO END (varA[4:]) OF ABOVE STRING IS =    I'M SHARMIN A
KHTER.
THE SLICE OF NEGATIVE INDEXING (varA[-5]) OF ABOVE STRING IS =    H
THE SLICE OF NEGATIVE INDEXING (varA[-15:-8]) OF ABOVE STRING IS =    SHARMIN
```

In [11]:
```python
print("MODIFY STRINGS - (UPPERCASE & LOWERCASE)")
varA = "HI! I'M SHARMIN AKHTER."
varB = varA.lower()
varC = "hi! i'm sharmin akhter."
varD = varC.upper()
print("THE GIVEN STRING IS\t\t= ", varA )
print("AFTER LOWER CASE THE STRING IS\t= ", varB )
print("THE GIVEN STRING IS\t\t= ", varC )
print("AFTER UPPER CASE THE STRING IS\t= ", varD )
```

```
MODIFY STRINGS - (UPPERCASE & LOWERCASE)
THE GIVEN STRING IS             =  HI! I'M SHARMIN AKHTER.
AFTER LOWER CASE THE STRING IS  =  hi! i'm sharmin akhter.
THE GIVEN STRING IS             =  hi! i'm sharmin akhter.
AFTER UPPER CASE THE STRING IS  =  HI! I'M SHARMIN AKHTER.
```

In [12]:
```python
print("MODIFY STRINGS - (REMOVE SPACE - STRIP() FROM BEGINING OR END)")
varA = "     HI! I'M SHARMIN AKHTER.  MY ID IS 201071054.    "
varB = varA.strip()
print("THE GIVEN STRING IS\t\t\t=", varA )
print("AFTER REMOVING SPACE THE STRING IS\t=", varB)
```

```
MODIFY STRINGS - (REMOVE SPACE - STRIP() FROM BEGINING OR END)
THE GIVEN STRING IS                  =       HI! I'M SHARMIN AKHTER.  MY I
D IS 201071054.
AFTER REMOVING SPACE THE STRING IS      = HI! I'M SHARMIN AKHTER.  MY ID IS 2
01071054.
```

In [13]:
```python
print("MODIFY STRINGS - (REPLACE STRING - REPLACE())")
varA = "HI! I'M SHARMIN AKHTER. MY ROLL IS 201071054."
varB = varA.replace("ROLL", "ID")
varC = varB.replace("201071054", "201071054 from CSE Dept.")
print("THE GIVEN STRING IS\t\t\t\t=", varA )
print("AFTER REPLACING (ROLL WITH ID ) THE STRING IS\t=", varB)
print("AFTER SECOND TIME REPLACING THE STRING IS\t=", varC)
```

```
MODIFY STRINGS - (REPLACE STRING - REPLACE())
THE GIVEN STRING IS                            = HI! I'M SHARMIN AKHTER. MY
ROLL IS 201071054.
AFTER REPLACING (ROLL WITH ID ) THE STRING IS  = HI! I'M SHARMIN AKHTER. MY
ID IS 201071054.
AFTER SECOND TIME REPLACING THE STRING IS      = HI! I'M SHARMIN AKHTER. MY
ID IS 201071054 from CSE Dept..
```

In [14]:
```python
print("MODIFY STRINGS - (SPLIT STRING - SPLIT())")
varA = "HI! I'M SHARMIN AKHTER. I LIKE MANGO, WATERMELON, LITCHI etc."
varB = varA.split()
varC = varA.split(".")
varD = varA.split(",")
print("THE GIVEN STRING IS =", varA )
print("AFTER SPLITING THE STRING IS =", varB)
print("AFTER SPLITING WITH (.) THE STRING IS =", varC)
print("AFTER SPLITING WITH (,) THE STRING IS =", varD)
```

```
MODIFY STRINGS - (SPLIT STRING - SPLIT())
THE GIVEN STRING IS = HI! I'M SHARMIN AKHTER. I LIKE MANGO, WATERMELON, LITCH
I etc.
AFTER SPLITING THE STRING IS = ['HI!', "I'M", 'SHARMIN', 'AKHTER.', 'I', 'LIK
E', 'MANGO,', 'WATERMELON,', 'LITCHI', 'etc.']
AFTER SPLITING WITH (.) THE STRING IS = ["HI! I'M SHARMIN AKHTER", ' I LIKE M
ANGO, WATERMELON, LITCHI etc', '']
AFTER SPLITING WITH (,) THE STRING IS = ["HI! I'M SHARMIN AKHTER. I LIKE MANG
O", ' WATERMELON', ' LITCHI etc.']
```

In [15]:
```python
print("MODIFY STRINGS - (STRIP & SPLIT")
varA = "I LIKE MANGO, WATERMELON, LITCHI."
varB = varA.split(",")
print("THE GIVEN STRING IS =", varA )
print("AFTER SPLITING THE STRING IS =", varB)
print(varB[0])
print(varB[1])
print(varB[1].strip())
print(varB[2])
print(varB[2].strip())
```

```
MODIFY STRINGS - (STRIP & SPLIT
THE GIVEN STRING IS = I LIKE MANGO, WATERMELON, LITCHI.
AFTER SPLITING THE STRING IS = ['I LIKE MANGO', ' WATERMELON', ' LITCHI.']
I LIKE MANGO
 WATERMELON
WATERMELON
 LITCHI.
LITCHI.
```

In [16]:
```python
print("MODIFY STRINGS - (SPLIT & FOR IN LOOP)")
varA = "HI! I'M SHARMIN AKHTER."
varB = varA.split(' ')
print("THE GIVEN STRING IS =", varA )
print("AFTER SPLITING THE STRING IS =", varB)
for i in varB:
    print(i)
```

```
MODIFY STRINGS - (SPLIT & FOR IN LOOP)
THE GIVEN STRING IS = HI! I'M SHARMIN AKHTER.
AFTER SPLITING THE STRING IS = ['HI!', "I'M", 'SHARMIN', 'AKHTER.']
HI!
I'M
SHARMIN
AKHTER.
```

In [17]:
```python
print("MODIFY STRINGS - STRING CONCATINATION USING (+) SIGN")
varA = "HI! I'M SHARMIN AKHTER."
varB = "MY ID IS 201071054."
varC= " "
print("THE FIRST STRING IS\t\t\t=", varA )
print("THE SECOND STRING IS\t\t\t=", varB )
print("AFTER CONCATINATION THE STRING IS\t= "+ varA + varC + varB )
```

```
MODIFY STRINGS - STRING CONCATINATION USING (+) SIGN
THE FIRST STRING IS                     = HI! I'M SHARMIN AKHTER.
THE SECOND STRING IS                    = MY ID IS 201071054.
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS 20
1071054.
```

In [18]:
```python
print("MODIFY STRINGS - STRING CONCATINATION USING (,) SIGN")
varA = "HI! I'M SHARMIN AKHTER."
varB = "MY ID IS 201071054."
varC= " "
print("THE FIRST STRING IS\t\t\t=", varA )
print("THE SECOND STRING IS\t\t\t=", varB )
print("AFTER CONCATINATION THE STRING IS\t=", varA,varC,varB )
```

```
MODIFY STRINGS - STRING CONCATINATION USING (,) SIGN
THE FIRST STRING IS                     = HI! I'M SHARMIN AKHTER.
THE SECOND STRING IS                    = MY ID IS 201071054.
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER.   MY ID IS
201071054.
```

In [19]:
```python
print("MODIFY STRINGS - STRING CONCATINATION with INTERGER ")
varA = "HI! I'M SHARMIN AKHTER. MY ID IS -"
varB = 201071054
print("THE GIVEN STRING IS\t\t\t=", varA )
print("THE INTEGER IS\t\t\t\t=", varB )
print("AFTER CONCATINATION THE STRING IS\t=", varA,str(varB) )
```

```
MODIFY STRINGS - STRING CONCATINATION with INTERGER
THE GIVEN STRING IS                     = HI! I'M SHARMIN AKHTER. MY ID IS -
THE INTEGER IS                          = 201071054
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS -
201071054
```

In [20]:
```python
print("MODIFY STRINGS - STRING CONCATINATION USING FORMAT")
varA = "HI! I'M SHARMIN AKHTER. MY ID IS - {}"
varB = 201071054
print("THE GIVEN STRING IS\t\t\t=", varA )
print("THE INTEGER IS\t\t\t\t=", varB )
print("AFTER CONCATINATION THE STRING IS\t=", varA.format(varB))
print("AFTER CONCATINATION THE STRING IS\t= "+ varA.format(varB))
```

```
MODIFY STRINGS - STRING CONCATINATION USING FORMAT
THE GIVEN STRING IS                     = HI! I'M SHARMIN AKHTER. MY ID IS -
{}
THE INTEGER IS                          = 201071054
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS -
201071054
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS -
201071054
```

In [21]:
```python
print("MODIFY STRINGS - STRING CONCATINATION USING FORMAT - MULTIPLE VALUE")
varA = "HI! I'M SHARMIN AKHTER. MY ID IS - {}. TODAY IS {} JUNE , {}."
varB = 201071054
varC = 2023
varD = 26
print("THE GIVEN STRING IS\t\t\t=", varA )
print("THE INTEGER's ARE\t\t\t=", varB, varC, varD )
print("AFTER CONCATINATION THE STRING IS\t=", varA.format(varB,varD,varC))
```

```
MODIFY STRINGS - STRING CONCATINATION USING FORMAT - MULTIPLE VALUE
THE GIVEN STRING IS                     = HI! I'M SHARMIN AKHTER. MY ID IS -
{}. TODAY IS {} JUNE , {}.
THE INTEGER's ARE                       = 201071054 2023 26
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS -
201071054. TODAY IS 26 JUNE , 2023.
```

In [22]:
```python
print("MODIFY STRINGS - STRING CONCATINATION USING FORMAT - MULTIPLE VALUE WITH
varA = "HI! I'M SHARMIN AKHTER. MY ID IS - {0}. TODAY IS {2} JUNE , {1}."
varB = 201071054
varC = 2023
varD = 26
print("THE GIVEN STRING IS\t\t\t=", varA )
print("THE INTEGER's ARE\t\t\t=", varD, varC, varB )
print("AFTER CONCATINATION THE STRING IS\t=", varA.format(varB,varC,varD))
```

```
MODIFY STRINGS - STRING CONCATINATION USING FORMAT - MULTIPLE VALUE WITH INDE
X
THE GIVEN STRING IS                     = HI! I'M SHARMIN AKHTER. MY ID IS -
{0}. TODAY IS {2} JUNE , {1}.
THE INTEGER's ARE                       = 26 2023 201071054
AFTER CONCATINATION THE STRING IS       = HI! I'M SHARMIN AKHTER. MY ID IS -
201071054. TODAY IS 26 JUNE , 2023.
```

In [23]:
```python
print("ESCAPE CHARACTER")
varA = "HI! I'M \"SHARMIN AKHTER\".\nMY ID IS - {0}.\nTODAY IS {2} JUNE , {1}.
varB = 201071054
varC = 2023
varD = 26
print("\nAFTER CONCATINATION THE STRING IS  =\n"+ varA.format(varB,varC,varD))
```

```
ESCAPE CHARACTER

AFTER CONCATINATION THE STRING IS  =
HI! I'M "SHARMIN AKHTER".
MY ID IS - 201071054.
TODAY IS 26 JUNE , 2023.
```

In [24]:
```python
print("STRING METHODS")
varB = "hi! i'm sharmin. my id is 201071054 "
varA = "HI! I'M SHARMIN AKHTER.I'M A STUDENT OF SMUCT."
print("GIVEN FIRST STRING (varA)\t=", varA)
print("GIVEN SECOND STRING (varB)\t=", varB)
print("\"CAPITALIZE\" in varB\t\t=",varB.capitalize())
print("\"CASEFOLD\" in varA\t\t=",varA.casefold())
print("\"COUNT\"(A) in varA\t\t=",varA.count("A"))
print("\"COUNT\"(a) in varA\t\t=",varA.count("a"))
print("\"COUNT\"(I'M) in varA\t\t=",varA.count("I'M"))
print("\"COUNT\"(\"\")in varA\t\t=",varA.count("")) #
print("\"LENGTH\" in varA\t\t=",len(varA))
print("\"FIND\"(A) in varA\t\t=",varA.find("A")) # it will return position
print("\"FIND\"(I'M) in varA\t\t=",varA.find("I'M")) # it will return position
```

```
STRING METHODS
GIVEN FIRST STRING (varA)       = HI! I'M SHARMIN AKHTER.I'M A STUDENT OF SMU
CT.
GIVEN SECOND STRING (varB)      = hi! i'm sharmin. my id is 201071054
"CAPITALIZE" in varB            = Hi! i'm sharmin. my id is 201071054
"CASEFOLD" in varA              = hi! i'm sharmin akhter.i'm a student of smu
ct.
"COUNT"(A) in varA              = 3
"COUNT"(a) in varA              = 0
"COUNT"(I'M) in varA            = 2
"COUNT"("")in varA              = 47
"LENGTH" in varA                = 46
"FIND"(A) in varA               = 10
"FIND"(I'M) in varA             = 4
```