ASSIGNMENT NO: 01

Submitted by:

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Submitted to:

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String Functions:

```
[1]        # Use of Lower Function
[2]        name='FaHeeM SiDDiQue'
[3]        name.lower()
```

OUTPUT:

faheem siddique

```
[4]        # Use of Upper Function
[5]        name='FaHeeM SiDDiQue'
[6]        name.upper()
```

OUTPUT:

FAHEEM SIDDIQUE

```
[7]        # Use of Capitalize Function
[8]        name='FaHeeM SiDDiQue'
[9]        name.capitalize()
```

OUTPUT:

Faheem siddique

```
[10]       # Use of Swapcase Function
[11]       name='FaHeeM SiDDiQue'
[12]       name.swapcase()
```

OUTPUT:

fAhEEm sIddIqUE

```
[13]       # Use of Title Function
[14]       name='FaHeeM SiDDiQue'
[15]       name.title()
```

OUTPUT:

Faheem Siddique

```
[16]       # Expandtab & Center Functions
[17]       txt = "H\te\tl\tl\to"
[18]       v=txt.expandtabs(8)
[19]       w=txt.expandtabs(6)
[20]       x = txt.expandtabs(8)
[21]       y=txt.expandtabs(6)
[22]       z=txt.expandtabs(4)
[23]       y1=y.center(33)
[24]       z1=z.center(33)
[25]       w1=w.center(33)
```

```
[26]      v1=v.center(33)
[27]      print(x)
[28]      print(y1)
[29]      print(z1)
[30]      print(w1)
[31]      print(v1)
```

OUTPUT:

```
H      e      l      l      o
H    e    l    l    o
H   e   l   l   o
H    e    l    l    o
H      e      l      l      o
```

```
[32]      # Use of Count & Upper Lower Function
[33]      a= "MY NAME IS FAHEEM SIDDIQUE"
[34]      b=a.upper()
[35]      c=a.lower()
[36]      x=a.count('A')
[37]      y=b.count('A')
[38]      z=c.count('A')
[39]      print(x)
[40]      print(y)
[41]      print(z)
```

OUTPUT:

```
2
2
0
```

```
[42]      # Use of Format Function
[43]      txt1 = "My name is {fname}, I'm {age}".format(fname = "John", age = 36)
[44]      txt2 = "My name is {}, I'm {:b}".format("john",36)
[45]      txt3 = "My name is {}, I'm {}".format("John",36)
[46]      print(txt1)
[47]      print(txt2)
[48]      print(txt3)
```

OUTPUT:

```
My name is John, I'm 36
My name is john, I'm 100100
My name is John, I'm 36
```

```
[49]      # Use of Find, Rfind, Index & Rindex Functions
[50]      txt = "Hello, welcome to my world."
[51]      x = txt.index("o",5,19)
[52]      y = txt.find("o",5,19)
[53]      b=txt.find("o",5,10)
[54]      c=txt.rfind('o')
[55]      d=txt.rfind('x')
[56]      e=txt.rindex('o')
```

```
[57]        f=txt.rfind('')
[58]        print(x)
[59]        print(y)
[60]        print(b)
[61]        print(c)
[62]        print(d)
[63]        print(e)
[64]        print(f)
```

OUTPUT:
```
11
11
-1
22
-1
22
27
```

```
[65]        # Use of isalpha & isalnum Functions
[66]        a1="ILovePakistan"
[67]        b1="I Love Pakistan"
[68]        a2="IL0v3Pakistan"
[69]        b2="ILovePakistan"
[70]        x1=a1.isalpha()
[71]        x2=b1.isalpha()
[72]        y1=a2.isalnum()
[73]        y2=b2.isalnum()
[74]        print(x1)
[75]        print(x2)
[76]        print(y1)
[77]        print(y2)
```

OUTPUT:
```
True
False
True
True
```

```
[78]        # Use of isnumeric , isdigit & isdecimal Functions
[79]        d = "-1"
[80]        e = "1.5"

[81]        print(d.isnumeric())
[82]        print(e.isnumeric())
[83]        print(d.isdigit())
[84]        print(e.isdecimal())
[85]        print(e.isdigit())
[86]        print(d.isdecimal())
```

OUTPUT:
```
False
```

```
         False
         False
         False
         False
         False

[87]     txt = "Sun Sets in the"
[88]     x = txt.ljust(25, "_")
[89]     y = txt.rjust(25, "_")

[90]     print(x)
[91]     print(y)
```

OUTPUT:

```
         Sun Sets in the_____
         _____Sun Sets in the
```

```
[92]     # Use of Endswith & Startswith Functions
[93]     f1='My name is Faheem Siddique'
[94]     f2='I love my country Pakistan'
[95]     s1=f1.endswith('Siddique')
[96]     s2=f1.endswith('Faheem')
[97]     s3=f2.endswith('n')
[98]     s4=f2.endswith('pakistan')
[99]     print(s1)
[100]    print(s2)
[101]    print(s3)
[102]    print(s4)
```

OUTPUT:

```
         True
         False
         True
         False
```

```
[103]    # Use of Islower, Isupper & Istitle Function
[104]    q1='FAHEEM SIDDIQUE'
[105]    q2='faheemsiddique'
[106]    q3='Faheem Siddique'
[107]    p1=q1.islower()
[108]    p2=q1.isupper()
[109]    p3=q2.islower()
[110]    p4=q2.isupper()
[111]    p5=q3.istitle()
[112]    print(p1)
[113]    print(p2)
[114]    print(p3)
[115]    print(p4)
[116]    print(p5)
```

OUTPUT:

```
         False
```

```
          True
          True
          False
          True

[117]     # Use of Join Function
[118]     ab=('Faheem','Siddique')
[119]     cd='-'.join(ab)
[120]     print(ab)
[121]     print(cd)
```

OUTPUT:

```
          ('Faheem', 'Siddique')
          Faheem-Siddique

[122]     # Use of Lstrip Rstrip & Strip Functions
[123]     s='*******Faheem Siddique*******'
[124]     t='      Pakistan         '
[125]     u=s.lstrip('*')
[126]     v=t.lstrip()
[127]     w=s.strip('*')
[128]     x=s.rstrip('*')
[129]     print(u)
[130]     print(v)
[131]     print(w)
[132]     print(x)
```

OUTPUT:

```
          Faheem Siddique*******
          Pakistan
          Faheem Siddique
          *******Faheem Siddique

[133]     # Use of Maketrans and Translate Functions
[134]     xy = "Faheem Siddique Faheem Siddique"
[135]     yy = xy.maketrans("Faheem Siddique", "FAHEEM SIDDIQUE")
[136]     zz = xy.maketrans("d", "D")
[137]     print(xy.translate(zz))
[138]     print(xy.translate(yy))
```

OUTPUT:

```
          Faheem SiDDique Faheem SiDDique
          FAHEEM SIDDIQUE FAHEEM SIDDIQUE

[139]     # Use of Partition & Rpartition Functions
[140]     aa='Engrt Faheem Siddique Engr Faheem Siddique'
[141]     bb=aa.partition('Faheem')
[142]     cc=aa.partition('heem')
[143]     dd=aa.rpartition('Faheem')
[144]     print(bb)
[145]     print(cc)
```

```
          ('Engrt ', 'Faheem', ' Siddique Engr Faheem Siddique')
          ('Engrt Fa', 'heem', ' Siddique Engr Faheem Siddique')
```

```
[146]    # Use of Replace Function
[147]    xy = "Faheem Siddique Faheem Siddique"
[148]    yy=xy.replace('Faheem','FAHEEM')
[149]    zz=xy.replace('Faheem','FAHEEM',1)
[150]    print(yy)
[151]    print(zz)
```

OUTPUT:
```
          FAHEEM Siddique FAHEEM Siddique
          FAHEEM Siddique Faheem Siddique
```

```
[152]    # Use of Split, Rsplit & Splitlines Functions
[153]    ee='My name is Faheem.\nI live in Pakistan.\nI Love my Country.'
[154]    ff='Python is in-
   demand language. It is widely used. I love Python most. Learn Python'
[155]    gg=ff.split()
[156]    hh=ff.split('.',2)
[157]    ii=ff.rsplit('.')
[158]    jj=ff.rsplit('.',2)
[159]    kk=ee.splitlines()
[160]    ll=ee.splitlines(True)
[161]    print(gg)
[162]    print(hh)
[163]    print(ii)
[164]    print(jj)
[165]    print(ee)
[166]    print(kk)
[167]    print(ll)
```

OUTPUT:
```
          ['Python', 'is', 'in-demand', 'language.', 'It', 'is', 'widely', 'used.',
          'I', 'love', 'Python', 'most.', 'Learn', 'Python']
          ['Python is in-demand language', ' It is widely used', ' I love Python
          most. Learn Python']
          ['Python is in-demand language', ' It is widely used', ' I love Python
          most', ' Learn Python']
          ['Python is in-demand language. It is widely used', ' I love Python most',
          ' Learn Python']
          My name is Faheem.
          I live in Pakistan.
          I Love my Country.
          ['My name is Faheem.', 'I live in Pakistan.', 'I Love my Country.']
          ['My name is Faheem.\n', 'I live in Pakistan.\n', 'I Love my Country.']
```

```
[168]    # Use of Zfill Function
[169]    oo='Faheem Siddique'
[170]    pp=oo.zfill(20)
[171]    print(pp)
```

OUTPUT:

```
00000Faheem Siddique
```

Escape Sequences:

```
[1]     # Single & Double Quotes
[2]     aa=('My Name is \'Faheem Siddique\'')
[3]     bb=('My Name is \"Faheem Siddique\"')
[4]     print(aa)
[5]     print(bb)
```

OUTPUT:

```
My Name is 'Faheem Siddique'
My Name is "Faheem Siddique"
```

```
[6]     # Backslash
[7]     cc=("My Name is \\Faheem Siddique\\")
[8]     print(cc)
```

OUTPUT:

```
My Name is \Faheem Siddique\
```

```
[9]     # New Line
[10]    dd=('Apple \nMango \nBanana')
[11]    print(dd)
```

OUTPUT:

```
Apple
Mango
Banana
```

```
[12]    # Carriage Return
[13]    ee=('Apple \rMango')
[14]    print(ee)
```

OUTPUT:

```
Mango
```

```
[15]    # Tab
[16]    ff=('Faheem\tSiddique')
[17]    gg=('Faheem\t\tSiddique')
[18]    print(ff)
[19]    print(gg)
```

OUTPUT:

```
Faheem      Siddique
Faheem              Siddique
```

```
[20]    # Backspace
```

```
[21]     hh=('Faheem \bSiddique')
[22]     ii=('Faheem \b\bSiddique')
[23]     print(hh)
[24]     print(ii)
```

OUTPUT:

```
FaheemSiddique
FaheeSiddique
```

```
[25]     # Octal Value
[26]     jj=('\111 \112 \113 \114 \115 \116')
[27]     print(jj)
```

OUTPUT:

```
I J K L M N
```

```
[28]     # Hexadecimal Value
[29]     kk=('\x50 \x51 \x52 \x53 \x54')
[30]     print(kk)
```

OUTPUT:

```
P Q R S T
```

Array Slicing:

```
[1]     arr1=[0,1,2,3,4,5,6,7,8,9,10]
[2]     print(arr1)
[3]     slice1=(arr1[1:5])
[4]     slice2=(arr1[3:10])
[5]     slice3=(arr1[1:10:2])
[6]     slice4=(arr1[0:10:2])
[7]     slice5=(arr1[:10:3])
[8]     slice6=(arr1[1::2])
[9]     slice7=(arr1[1:7:])
[10]    print(slice1)
[11]    print(slice2)
[12]    print(slice3)
[13]    print(slice4)
[14]    print(slice5)
[15]    print(slice6)
[16]    print(slice7)
```

OUTPUT:

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
[1, 2, 3, 4]
[3, 4, 5, 6, 7, 8, 9]
[1, 3, 5, 7, 9]
[0, 2, 4, 6, 8]
[0, 3, 6, 9]
[1, 3, 5, 7, 9]
[1, 2, 3, 4, 5, 6]
```