**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

1. # Use of Upper Function
2. name='FaHeeM SiDDiQue'
3. name.upper()

**OUTPUT:**

FAHEEM SIDDIQUE

1. # Use of Capitalize Function
2. name='FaHeeM SiDDiQue'
3. name.capitalize()

**OUTPUT:**

Faheem siddique

1. # Use of Swapcase Function
2. name='FaHeeM SiDDiQue'
3. name.swapcase()

**OUTPUT:**

fAhEEm sIddIqUE

1. # Use of Title Function
2. name='FaHeeM SiDDiQue'
3. name.title()

**OUTPUT:**

Faheem Siddique

1. # Expandtab & Center Functions
2. txt = "H\te\tl\tl\to"
3. v=txt.expandtabs(8)
4. w=txt.expandtabs(6)
5. x = txt.expandtabs(8)
6. y=txt.expandtabs(6)
7. z=txt.expandtabs(4)
8. y1=y.center(33)
9. z1=z.center(33)
10. w1=w.center(33)
11. v1=v.center(33)
12. print(x)
13. print(y1)
14. print(z1)
15. print(w1)
16. 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

1. # Use of Count & Upper Lower Function
2. a= "MY NAME IS FAHEEM SIDDIQUE"
3. b=a.upper()
4. c=a.lower()
5. x=a.count('A')
6. y=b.count('A')
7. z=c.count('A')
8. print(x)
9. print(y)
10. print(z)

**OUTPUT:**

2

2

0

1. # Use of Format Function
2. txt1 = "My name is {fname}, I'm {age}".format(fname = "John", age = 36)
3. txt2 = "My name is {}, I'm {:b}".format("john",36)
4. txt3 = "My name is {}, I'm {}".format("John",36)
5. print(txt1)
6. print(txt2)
7. print(txt3)

**OUTPUT:**

My name is John, I'm 36

My name is john, I'm 100100

My name is John, I'm 36

1. # Use of Find, Rfind, Index & Rindex Functions
2. txt = "Hello, welcome to my world."
3. x = txt.index("o",5,19)
4. y = txt.find("o",5,19)
5. b=txt.find("o",5,10)
6. c=txt.rfind('o')
7. d=txt.rfind('x')
8. e=txt.rindex('o')
9. f=txt.rfind('')
10. print(x)
11. print(y)
12. print(b)
13. print(c)
14. print(d)
15. print(e)
16. print(f)

**OUTPUT:**

11

11

-1

22

-1

22

27

1. # Use of isalpha & isalnum Functions
2. a1="ILovePakistan"
3. b1="I Love Pakistan"
4. a2="IL0v3Pakistan"
5. b2="ILovePakistan"
6. x1=a1.isalpha()
7. x2=b1.isalpha()
8. y1=a2.isalnum()
9. y2=b2.isalnum()
10. print(x1)
11. print(x2)
12. print(y1)
13. print(y2)

**OUTPUT:**

True

False

True

True

1. # Use of isnumeric , isdigit & isdecimal Functions
2. d = "-1"
3. e = "1.5"
4. print(d.isnumeric())
5. print(e.isnumeric())
6. print(d.isdigit())
7. print(e.isdecimal())
8. print(e.isdigit())
9. print(d.isdecimal())

**OUTPUT:**

False

False

False

False

False

False

1. txt = "Sun Sets in the"
2. x = txt.ljust(25, "\_")
3. y = txt.rjust(25, "\_")
4. print(x)
5. print(y)

**OUTPUT:**

Sun Sets in the\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_Sun Sets in the

1. # Use of Endswith & Startswith Functions
2. f1='My name is Faheem Siddique'
3. f2='I love my country Pakistan'
4. s1=f1.endswith('Siddique')
5. s2=f1.endswith('Faheem')
6. s3=f2.endswith('n')
7. s4=f2.endswith('pakistan')
8. print(s1)
9. print(s2)
10. print(s3)
11. print(s4)

**OUTPUT:**

True

False

True

False

1. # Use of Islower, Isupper & Istitle Function
2. q1='FAHEEM SIDDIQUE'
3. q2='faheemsiddique'
4. q3='Faheem Siddique'
5. p1=q1.islower()
6. p2=q1.isupper()
7. p3=q2.islower()
8. p4=q2.isupper()
9. p5=q3.istitle()
10. print(p1)
11. print(p2)
12. print(p3)
13. print(p4)
14. print(p5)

**OUTPUT:**

False

True

True

False

True

1. # Use of Join Function
2. ab=('Faheem','Siddique')
3. cd='-'.join(ab)
4. print(ab)
5. print(cd)

**OUTPUT:**

('Faheem', 'Siddique')

Faheem-Siddique

1. # Use of Lstrip Rstrip & Strip Functions
2. s='\*\*\*\*\*\*\*Faheem Siddique\*\*\*\*\*\*\*'
3. t='       Pakistan       '
4. u=s.lstrip('\*')
5. v=t.lstrip()
6. w=s.strip('\*')
7. x=s.rstrip('\*')
8. print(u)
9. print(v)
10. print(w)
11. print(x)

**OUTPUT:**

Faheem Siddique\*\*\*\*\*\*\*

Pakistan

Faheem Siddique

\*\*\*\*\*\*\*Faheem Siddique

1. # Use of Maketrans and Translate Functions
2. xy = "Faheem Siddique Faheem Siddique"
3. yy = xy.maketrans("Faheem Siddique", "FAHEEM SIDDIQUE")
4. zz = xy.maketrans("d", "D")
5. print(xy.translate(zz))
6. print(xy.translate(yy))

**OUTPUT:**

Faheem SiDDique Faheem SiDDique

FAHEEM SIDDIQUE FAHEEM SIDDIQUE

1. # Use of Partition & Rpartition Functions
2. aa='Engrt Faheem Siddique Engr Faheem Siddique'
3. bb=aa.partition('Faheem')
4. cc=aa.partition('heem')
5. dd=aa.rpartition('Faheem')
6. print(bb)
7. print(cc)

**OUTPUT:**

('Engrt ', 'Faheem', ' Siddique Engr Faheem Siddique')

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

1. # Use of Replace Function
2. xy = "Faheem Siddique Faheem Siddique"
3. yy=xy.replace('Faheem','FAHEEM')
4. zz=xy.replace('Faheem','FAHEEM',1)
5. print(yy)
6. print(zz)

**OUTPUT:**

FAHEEM Siddique FAHEEM Siddique

FAHEEM Siddique Faheem Siddique

1. # Use of Split, Rsplit & Splitlines Functions
2. ee='My name is Faheem.\nI live in Pakistan.\nI Love my Country.'
3. ff='Python is in- demand language. It is widely used. I love Python most. Learn Python'
4. gg=ff.split()
5. hh=ff.split('.',2)
6. ii=ff.rsplit('.')
7. jj=ff.rsplit('.',2)
8. kk=ee.splitlines()
9. ll=ee.splitlines(True)
10. print(gg)
11. print(hh)
12. print(ii)
13. print(jj)
14. print(ee)
15. print(kk)
16. 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.']

1. # Use of Zfill Function
2. oo='Faheem Siddique'
3. pp=oo.zfill(20)
4. 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"

1. # Backslash
2. cc=("My Name is \\Faheem Siddique\\")
3. print(cc)

**OUTPUT:**

My Name is \Faheem Siddique\

1. # New Line
2. dd=('Apple \nMango \nBanana')
3. print(dd)

**OUTPUT:**

Apple

Mango

Banana

1. # Carriage Return
2. ee=('Apple \rMango')
3. print(ee)

**OUTPUT:**

Mango

1. # Tab
2. ff=('Faheem\tSiddique')
3. gg=('Faheem\t\tSiddique')
4. print(ff)
5. print(gg)

**OUTPUT:**

Faheem Siddique

Faheem Siddique

1. # Backspace
2. hh=('Faheem \bSiddique')
3. ii=('Faheem \b\bSiddique')
4. print(hh)
5. print(ii)

**OUTPUT:**

FaheemSiddique

FaheeSiddique

1. # Octal Value
2. jj=('\111 \112 \113 \114 \115 \116')
3. print(jj)

**OUTPUT:**

I J K L M N

1. # Hexadecimal Value
2. kk=('\x50 \x51 \x52 \x53 \x54')
3. 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]