```
print(10,20,30)
print(10,20,30,sep='\n')
print(10)
print(20)
print(30)
→ 10 20 30
      10
      20
      30
      10
      20
print(10,2.89,'string',False)
→ 10 2.89 string False
print(10,end='\n')
print(10,end='\nhello\n')
print(10)
print(10,"\n",20)
\overline{\Rightarrow}
     10
      10
      hello
      10
      10
       20
i=10
print(i)
→ 10
print(10,2.89,'string',False)
print(10,2.89,'string',False,sep=' ')
print(10,2.89,'string',False,sep=' | ')
     10 2.89 string False
      10 2.89 string False
10 | 2.89 | string | False
print(end='abc\n')
print(sep='abc')
print(1,2,3,sep=' ')
print(1,2,3,sep=None)
→ abc
      1 2 3
      1 2 3
print(1,2,3,sep='*',4,5)
        File "<ipython-input-39-8595e980a47f>", line 1 print(1,2,3,sep='*',4,5)
      SyntaxError: positional argument follows keyword argument
print('python')
print("python")
print('''python''')
print('',"python",'')
→ python
      python
      python
       python
print('"python"')
print("''python'''")
print("'python'")
print("python")
print("python,@#$%^&* 23, 0.4")
```

```
"python"
'''python'''
     'python'
     python
     python,@#$%^&* 23, 0.4
print("\"python\"")
print("\"pyt\hon\"")
⇒ "python" "pyt\hon"
print("p\ny\thon")
→ p
             hon
s = 'python'
n='django'
3.7
print(s,n)
→ python django
i = 100
x = 1
i1 = 3
i2 = 4
i_ = 5
abc_ = 6
a1_ = 7
_ = 7
_ = 100
ac=2
print(i,x,abc,i1,i2,i_,abc_,a1_,_,ac)
→ 100 1 2 3 4 5 6 7 100 2
a=10
a=30
A=20
print(a,A)
<del>30</del> 30 20
s='python'
print(s[0],s[-3])
print(s[0:1])
print(s)
print('hello'[3])
→ p h
     python
i = 10
i = 12
j = 'python'
i = 100
print(i)
print(type(i))
print(id(i))
print(len(j))
→ 100
     <class 'int'>
     134555035422032
print(10,i,type(i),id(i),i)
→ 10 100 <class 'int'> 134555035422032 100
```

```
s = 'python'
print(s[0:5])
→ pytho
print(s[4:4])
print(s[:])
print(s[-3:-1])
print(s[-1:-6])
print(s[-4:-3])
     python
     t
print(s[:100]) # i
print(s[0:10]) # p
print(s[0:]) #
print(s[-5:5]) # error
print(s[-10:4]) # error
print(s[:len(s)])
→ python
     python
     python
     ytho
     pyth
     python
print(s[1:5:1])
print(s[1:5:2])
print(s[1:5:100])
→ ytho
    yh
print(s[1:5:-1])
print(s[-1:2:1])
print(s[-1:2:-1])
\overline{z}
     noh
print(s[::-1]) # no
print(s[-1:-7:-1])
print(s[::-2])
print(s[0::1]) # py
print(s[::])
print(s[-1:-7:]) # python
print(s[-6:6:-1]) # empty
print(s[-6:6:]) # python
→ nohtyp
     nohtyp
     nhy
     python
     python
    python
s='python'
print(s,id(s))
print(s.upper())
s=s.upper()
print(s,id(s))
n=s.upper() # n='PYTHON'
print(n,id(n))
→ python 136388711128880
     PYTHON 136387668124784
     PYTHON 136388504802096
```

```
s='Py23 tHo!@n'
print(s.upper())
→ PY23 THO!@N
s='python' # python
print(s.lower())
s='pYthOn' # python
print(s.lower())
s='py TH!@ 123 on' # py th!@ 123 on
print(s.lower())
→ python
     python
     py th!@ 123 on
s='python'
print(s.isupper()) # False
print(s.islower()) # True
s='pYthOn'
print(s.isupper()) # False
print(s.islower()) # False
s='py TH!@ 123 on'
print(s.isupper()) # False
print(s.islower()) # False
→ False
     True
     False
     False
     False
     False
s='hyderabad'
print(s.title())
s='Hyderabad'
print(s.title())
s='hyderabad123
print(s.title())
s='hyderaBad123'
print(s.title())
s='123hyderabad123'
print(s.title())
s='123hydera bad123'
print(s.title())

→ Hyderabad
     Hyderabad
     Hyderabad123
     Hyderabad123
     123Hyderabad123
     123Hydera Bad123
s='hyderabad'
print(s.capitalize())
s='Hyderabad'
print(s.capitalize())
s='hyderabad123'
print(s.capitalize())
s='hyderaBad123'
print(s.capitalize())
s='123hyderabad123'
print(s.capitalize())
s='123hydera bad123'
print(s.capitalize())
s='good morning'
print(s.capitalize())
s='Good Morning'
print(s.capitalize())

→ Hyderabad
     Hyderabad
     Hyderabad123
     Hyderabad123
     123hyderabad123
     123hydera bad123
     Good morning
     Good morning
```

```
s='hyderabad'
print(s.isalpha())
s='Hyderabad'
print(s.isalpha())
s='hyderabad123'
print(s.isalpha())
s='hyderaBad123'
print(s.isalpha())
s='123hyderabad123'
print(s.isalpha())
s='123hydera bad123'
print(s.isalpha())
s='good morning'
print(s.isalpha())
s='Good Morning'
print(s.isalpha())
→ True
     True
     False
     False
     False
     False
     False
     False
s='hyderaBad123'
print(s.isdigit())
s='123123'
print(s.isdigit())
s='123hydera bad123'
print(s.isdigit())
s='good morning'
print(s.isdigit())
→ False
     True
     False
     False
s='hyderaBad123'
print(s.isalnum())
s='123123'
print(s.isalnum())
s='123hydera bad123'
print(s.isalnum())
s='good morning
print(s.isalnum())
s='Good@Morning'
print(s.isalnum())
→ True
     True
     False
     False
     False
s='hyderaBad123'
print(s.count('h')) # 1
s='123123'
print(s.count('1')) # 2
s='123hydera bad123'
print(s.count(' ')) # 1
s='good morning'
print(s.count('o')) # 3
s='Good@Moorning'
print(s.count('@')) # 1
print(s.count('oo')) # 2
s='Goood@Moorning'
print(s.count('oo')) # 2
₹
     1
     3
     1
     2
     2
s = 'python' # pythoN
print(s[::-1].title()[::-1]) # nohtyp - Nohtyp - pythoN
```

```
→ pythoN
s='Good@Moorning'
print(s.replace('@',' '))
s='Goood@Moorning'
print(s.replace('ooo','oo'))
→ Good Moorning
     Good@Moorning
s='Good Morning'
# good morning
# Good morning
# good morning
# goodmorning
# Morning Good
s='Good Morning'
print(s[::-1].lower()[::-1])
s='Good Morning'
print(s[::1].capitalize()[::1])
s='Good Morning'
print(s[::1].lower()[::1])
s='Good Morning'
print(s.lower().replace(' ',''))
print(s[5:]+' '+s[:5])

→ good morning

     Good morning
     good morning
     goodmorning
     Morning Good
s = 'good morning'
print(s.replace('o','0'))
s = 'good morning'
print(s.replace('oo','00'))
    gOOd mOrning
     gOOd morning
s = 'good morning'
print(s.replace('o','0',1))
print(s.replace('o','0',2))
print(s.replace('o','0',4))
print(s.replace('o','0',0))
print(s.replace('o','0',-2))
print(s.replace('o','0',-1))
print(s.replace('o','0',-3))
→ gOod morning
     gOOd morning
     gOOd mOrning
     good morning
     gOOd mOrning
     gOOd mOrning
     gOOd mOrning
s = 'python'
print(s.startswith('p'))
print(s.startswith('y'))
print(s.startswith('y',1))
    True
₹
     False
     True
s = 'python' #nohtyp
print(s[::-1].startswith('n'))
print(s[::-1].startswith('p'))
print(s[::-1].startswith('p',5))
print(s.startswith('py'))
print(s.startswith('py',0,5))
print(s[::-1].startswith('p'))
    True
     False
     True
     True
     True
```

False

```
s = 'python'
print(s.endswith('n'))
print(s.endswith('o',0,5))
→ True
     True
s = 'python'
print(s.center(10,'*'))
print(s.center(11,' '))
print(s.center(10,'-'))
s = 'java script'
print(s.center(20,'a'))
print(s.center(21,'1'))
print(s.center(21,'-'))
**python**
       python
     --python--
     aaaajava scriptaaaaa
     11111java script11111
     ----java script----
s = 'hello, good morning'
print(s)
→ hello, good morning
s = 'hello, good'
print(s.format('morning'))
s = 'hello, good {}'
print(s.format('morning'))
s = '\{\} \{\} \{\}'
print(s.format('123','good','evening'))
s = '{} {} {} {}'
print(s.format('hello','good','evening','everyone'))
→ hello, good
     hello, good morning
     123 good evening
     hello good evening everyone
s = '\{\} \{\} \{\} \{\} \}'
print(s.format('hello','good','evening','everyone'))
                                                Traceback (most recent call last)
     <ipython-input-47-b5314abd72d5> in <cell line: 2>()
     1 s = '{} {} {} {} {} {} {} {} .---> 2 print(s.format('hello','good','evening','everyone'))
     IndexError: Replacement index 4 out of range for positional args tuple
s = 'I have {2}, {0} and {1} notes'
print(s.format(10,20,50))
→ I have 50, 10 and 20 notes
s = 'I have {2} {0} and {} notes'
print(s.format(10,20,50))
    _____
                                               Traceback (most recent call last)
     ValueError
     <ipython-input-51-9b0b8fe0ff70> in <cell line: 2>()
     1 s = 'I have {2} {0} and {} notes'
---> 2 print(s.format(10,20,50))
     ValueError: cannot switch from manual field specification to automatic field
     numbering
s = 'I have {2}, {1} and {3} notes'
print(s.format(10,20,50))
```

```
IndexError

IndexError

IndexError

IndexError

IndexError

IndexError

IndexError:

IndexError:
```