In [1]:
```
1 print(dir(str))
```

```
['__add__', '__class__', '__contains__', '__delattr__', '__dir__', '__doc__',
'__eq__', '__format__', '__ge__', '__getattribute__', '__getitem__', '__getnewa
rgs__', '__gt__', '__hash__', '__init__', '__init_subclass__', '__iter__', '__l
e__', '__len__', '__lt__', '__mod__', '__mul__', '__ne__', '__new__', '__reduce
__', '__reduce_ex__', '__repr__', '__rmod__', '__rmul__', '__setattr__', '__siz
eof__', '__str__', '__subclasshook__', 'capitalize', 'casefold', 'center', 'cou
nt', 'encode', 'endswith', 'expandtabs', 'find', 'format', 'format_map', 'inde
x', 'isalnum', 'isalpha', 'isascii', 'isdecimal', 'isdigit', 'isidentifier', 'i
slower', 'isnumeric', 'isprintable', 'isspace', 'istitle', 'isupper', 'join',
'ljust', 'lower', 'lstrip', 'maketrans', 'partition', 'replace', 'rfind', 'rind
ex', 'rjust', 'rpartition', 'rsplit', 'rstrip', 'split', 'splitlines', 'startsw
ith', 'strip', 'swapcase', 'title', 'translate', 'upper', 'zfill']
```

In [5]:
```
1 s = "python programming"
2 s.capitalize()  # capitalise the first charecter
```

Out[5]: 'Python programming'

In [11]:
```
1 s1 = "PythoN"
2 s2 = "python"
3 s1.casefold()  # converts to lowercase alphabet  based on keyboards
```

Out[11]: 'python'

In [12]:
```
1 s1.lower() # always converts to lowercase
```

Out[12]: 'python'

In [15]:
```
1 s1
```

Out[15]: 'PythoN'

In [13]:
```
1 s2.upper() # converts to uppercase
```

Out[13]: 'PYTHON'

In [14]:
```
1 s1.swapcase()  # converts uppercase alphabets to lower and lowercase to uppe
```

Out[14]: 'pYTHOn'

In [35]:
```
s =  "Python123"
print(s.isdigit())
s1 = "Python Programmming 123 #$@"
print(s1.isdigit())
s2 ="12345"
s2.isdigit()
```

```
False
False
```

Out[35]:
```
True
```

In [34]:
```
s3 = "Python Programmming"
print(s3.isalpha())
s4 = "PythonProgramming"
print(s4.isalpha())
```

```
False
True
```

In [36]:
```
s1 = "Python Programmming 123 #$@"
print(s1.isalnum())
```

```
False
```

In [44]:
```
s =  "Python123"
print(s.isalnum())
```

```
True
```

In [52]:
```
s3 = "hfdjgsaPython#$# Programmming"
s4= s3.split("#")
type(s4)
s3
s4
```

Out[52]:
```
['hfdjgsaPython', '$', ' Programmming']
```

In [66]:
```
s1 = "Pty12hon Programmming 123 #$@"
for i in s1:
    if i.isdigit():
        #print(i,end= "")
        print(i)
```

```
1
2
1
2
3
```

In [64]:
```
s1 = "Pyth12on Programmming 123 #$@".split()
print(s1)
for i in s1:
    if i.isdigit():
        print(i)

```

```
['Pyth12on', 'Programmming', '123', '#$@']
123
```

In [81]:
```
s = "     Python Programming        "
s.replace(" ","")
s.replace(" ","@")
```

Out[81]:
```
'@@@@@Python@Programming@@@@@@@@'
```

In [71]:
```
print(s.lstrip())
print(s.rstrip())
print(s.strip())
```

```
Python Programming
     Python Programming
Python Programming
```

In [79]:
```
print(s.replace(" ","@"))
print(s.replace("P","#"))
s1 =s.strip()
s1.replace(" ","")
s.replace(" ","")
```

```
@@@@@Python@Programming@@@@@@@@
     #ython #rogramming
```

Out[79]:
```
'PythonProgramming'
```

In [83]:
```
s = "Python Programming"
"@".join(s)
"CSE".join(s)
```

Out[83]:
```
'PCSEyCSEtCSEhCSEoCSEnCSE CSEPCSErCSEoCSEgCSErCSEaCSEmCSEmCSEiCSEnCSEg'
```

In [86]:
```
s.count("g")
print(s.count("m"))
print(s.count("mm"))
```

```
2
1
```

In [97]:
```
s.index("g")
s.index("1")
```

Out[97]: 19

In [98]:
```
s= "Python programming 123"
s.istitle()
```

Out[98]: False

In [99]:
```
s.title()
```

Out[99]: 'Python Programming 123'

In [100]:
```
s.startswith("P")
```

Out[100]: True

In [124]:
```
s = "Python"
s  #APSSDCPythonAPSSDC # @@@@@@@Python@@@@@@@
s.center(10,"1")
```

Out[124]: '11Python11'

In [138]:
```
s ="Python Python Pyhon Programming"
for i in range(len(s)):
    #print(i) # 0,1,2,3
    # print(s[i]) #Pyt
    if s[i] == "P":
        print(i)

```

```
0
7
14
20
```

In [134]:
```
s ="Python Python Pyhon Programming"
for i in s:
    if i == "P":
        print(s.index(i))
```

```
0
0
0
0
```

In [ ]:
```

```