

In [1]:

```
1 e = "Sample Program"
```

In [2]:

```
1 print(dir(e))
```

```
['_add_', '__class__', '__contains__', '__delattr__', '__dir__', '__doc__',
'__eq__', '__format__', '__ge__', '__getattr__', '__getitem__', '__getnewargs__',
'__gt__', '__hash__', '__init__', '__init_subclass__', '__iter__', '__le__',
'__len__', '__lt__', '__mod__', '__mul__', '__ne__', '__new__', '__reduce__',
'__reduce_ex__', '__repr__', '__rmod__', '__rmul__', '__setattr__', '__sizeof__',
'__str__', '__subclasshook__', 'capitalize', 'casefold', 'center', 'count',
'encode', 'endswith', 'expandtabs', 'find', 'format', 'format_map', 'index',
'isalnum', 'isalpha', 'isascii', 'isdecimal', 'isdigit', 'isidentifier',
'islower', 'isnumeric', 'isprintable', 'isspace', 'istitle', 'isupper',
'join', 'ljust', 'lower', 'lstrip', 'maketrans', 'partition', 'replace',
'rfind', 'rindex', 'rjust', 'rpartition', 'rsplit', 'rstrip', 'split',
'splitlines', 'startswith', 'strip', 'swapcase', 'title', 'translate', 'upper',
'zfill']
```

In [26]:

```
1 g = "raJu"
2 t = "rajesh123"
```

In [28]:

```
1 print(g.isalnum())
2 print(t.isalnum())
3 print(g.isalpha())
4 print(t.isalpha())
5 print(g.islower())
6 print(g.isupper())
```

True
True
True
False
False
False

In [40]:

```
1 r = '45.786'
2 y = '345'
3 p = "23$56&"
4 l = '73423432'
5 print(y.isnumeric())
6 print(r.isdecimal()) # 0xff
7 print(l.isdigit())
```

True
False
True
False

In [45]:

```
1 k = "Q"
2 print(k.isidentifier())
```

True

In [57]:

```
1 h = "raju is good at programming"
2 # print(h.isspace())
3 for i in h:
4     if i.isspace():
5         print("$$$ ", end="")
6     else:
7         print(i, end="")
```

raju\$\$\$is\$\$\$good\$\$\$at\$\$\$programming

In [52]:

```
1 j = " "
2 print(j.isspace())
```

True

In [60]:

```
1 m = input()
2 nu, alp, sp = "", "", ""
3 for w in m:
4     if w.isnumeric():
5         nu += w
6     elif w.isalpha():
7         alp += w
8     else:
9         sp += w
10 print("Numbers in a string is: "+nu)
11 print("Characters in a string is: "+alp)
12 print("Special characters in a string is: "+sp)
```

123@##asdahsd

Numbers in a string is: 123

Characters in a string is: asdahsd

Special characters in a string is: @##

In [69]:

```
1 q = "00007"
2 k1 = "23423"
3 print(q.isdecimal())
4 print(q.isnumeric())
```

True

True

In [72]:

```
1 ty = "Raju Teach Programming"
2 rw = "somu teaches only python"
3 print(ty.istitle())
4 print(rw.istitle())
5 print(rw.islower())
```

True
False
True

In []:

1
