

Functional arguments passing types

- Default argument
- Required argument
- Keyword argument
- Variable length argument

In [10]:

```
1 # Default argument
2
3 def sa(p,m=3):
4     print(p,m)
5     return
6
7 n = int(input())
8 l = int(input())
9 sa(n)
```

56

67

56 3

In [21]:

```
1 # Required argument (or) Positional argument
2
3 def sd(p,q,l=90):
4     print(p,q,l)
5     return
6
7
8 n = input()
9 m = input()
10 k = input()
11 sd(n,m,k)
12 # sd(45,12)
```

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23 13 15

In [32]:

```
1 # Keyword argument
2
3 def na(n,p,ls=89):
4     print(n,p,ls)
5     return
6
7 n = int(input())
8 ls = int(input())
9 p = int(input())
10 na(ls='90',n='56',p='85')
```

```
1
3
2
56 85 90
```

In [39]:

```
1 # Variable Length argument
2
3 def maru(e,*er):
4     print(e,end="\n")
5     for i in er:
6         if i%2 == 0:
7             print(i,end=" ")
8     # print(er,type(er))
9     return
10
11 maru(45,78,23,90,34,5,6,7,8,12,89)
```

```
45
78 90 34 6 8 12
```

Python Data Structures

- String -> ' ' or " "
- List -> any type of data
- Tuple -> any type of data
- Set -> any type of data
- Dictionary -> (key,value) pairs

Strings

In [44]:

```
1 help(print)
```

Help on built-in function print in module builtins:

```
print(...)
    print(value, ..., sep=' ', end='\n', file=sys.stdout, flush=False)
```

Prints the values to a stream, or to sys.stdout by default.

Optional keyword arguments:

file: a file-like object (stream); defaults to the current sys.stdout.

sep: string inserted between values, default a space.

end: string appended after the last value, default a newline.

flush: whether to forcibly flush the stream.

In [45]:

```
1 print(dir(str))
```

```
['__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 [48]:

```
1 help(str.capitalize)
```

Help on method_descriptor:

```
capitalize(self, /)
    Return a capitalized version of the string.
```

More specifically, make the first character have upper case and the rest lower case.

In [49]:

```
1 m = "raju"
```

In [50]:

```
1 m
```

Out[50]:

```
'raju'
```

In [51]:

```
1 m.capitalize()
```

Out[51]:

```
'Raju'
```

In []:

```
1
```