1) The function "echo_name" takes 2 parameters: a string value, "name1"and an integer value, "echo_int". It returns a string that is a concatenation of "echo_int" copies of "name1".

Your task is to convert this simple function into a lambda function.

Instructions:
Define the lambda function "echo_name" using the variables "name1" and "echo_int". Replicate what the original function definition for "echo_name ()" does above.
Call "echo_name ()" with the string argument 'acadgild' and the value 5, in that order. Assign the call to result

Expected Output

acadgildacadgildacadgildacadgildacadgild

In [1]:
```
# Define a lambda function: echo_name

echo_name = (lambda x,y:x*y)

# Call echo_name with parameters ("acadgild",5)
result = echo_name ("acadgild",5)

# Print result
print(result)
```

```
acadgildacadgildacadgildacadgildacadgild
```

2) Convert temperature in Celsius to Fahrenheit using map() and lambda functions

Sample input
Celsius = [49.2, 26.5, 47.3, 47.8]

Expected Output
[120.56, 79.7, 117.14, 118.03999999999999]

In [2]:
```
# Initialize list
Celsius = [49.2, 26.5, 47.3, 47.8]


#use map() and lambda,convert to Fahrenheit
#map(function,list)
Fahrenheit = list(map(lambda x:x*9/5 + 32,Celsius))

#print Fahrenheit
print(Fahrenheit)
```

```
[120.56, 79.7, 117.14, 118.03999999999999]
```

3) The function filter(function, list) filters out all the elements of a list, for which the function function returns True. The function filter(f,l) needs a function f as its first argument. f re turns a Boolean value, i.e. either True or False. This function will be applied to every element of the list l. Only if f returns True will the element of the list be included in the result list Q. print the letters that are vowels using filter and lambda functions

sample_string = "Welcome to AcadGild"

Expected Output ['e', 'o', 'e', 'o', 'A', 'a', 'i']

In [2]:
```
sample_string = "Welcome to AcadGild"

def is_vowel(x):
    if('aeiouAEIOU'.find(x)>=0):
        return True
result = list(filter(is_vowel,sample_string))
print(result)
```

```
['e', 'o', 'e', 'o', 'A', 'a', 'i']
```

4) Use generator expression to print out only alphabets from the following string

string = "123@Welc34ometo12@ac#adGild"

In [3]:
```
string = "123@Welc34ometo12@ac#adGild"
''.join(x for x in string if x.isalpha())
```

Out[3]:
```
'WelcometoacadGild'
```

5) Implement a function longestWord() that takes a list of words and returns the longest one.

```
Sample Word List
word= ["January","Feburary","March","April","May","June","July"]

Expected Output
['Feburary']
```

In [13]:
```
 # Initialize the list
word=  ["January","Feburary","March","April","May","June","July"]

#define function named longestWord with one parameter (arg_word)
def longestWord(arg_word):

    #use len(max()) to apply the logic
    max_len = len(max(arg_word,key=len))

    # iterate over the list arg_word and check which word has length = max_len an
    return [x for x in arg_word if len(x) == max_len]

#function call : longestWord and pass the list "word" as the parameter
print(longestWord(word))
```

```
['Feburary']
```

In [ ]:
```

```