Answer on Question #62199, Programming & Computer Science / Python

You need to design an iterative and a recursive function called replicate_iter and replicate_recur respectively which will receive two arguments: times which is the number of times to repeat and data which is the number or string to be repeated.

Solution:

Iterative function using while loop:

```
def replicate_iter(n, dat):
    answer = ""
    k = 0
    while k < n:
        answer = answer + str(dat)
        k += 1
    return answer
```

Examples:

```
print (replicate_iter (5,6))
print (replicate_iter (2,"123abcd "))
```

66666

123abcd 123abcd

Recursive function (calls itself):

```
def replicate_recur(n, dat):
    if n <= 0:
        return ""
    else:
        return replicate_recur(n - 1, dat) + str(dat)
```

Examples:

```
print (replicate_recur (5,6))
print (replicate_recur (2,"abcd123 "))
```

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abcd123 abcd123

Screenshot of both functions:

```
1  def replicate_iter(n, dat):
2      answer = ""
3      k = 0
4      while k < n:
5          answer = answer + str(dat)
6          k += 1
7      return answer
8
9  def replicate_recur(n, dat):
10     if n <= 0:
11         return ""
12     else:
13         return replicate_recur(n - 1, dat) + str(dat)
```