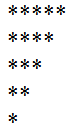
Example

Q1) Create a function (recursive functions) to find the factorial of an integer. A factorial is the product of all integers from 1 to the number itself.

Q2) Write a recursive function that prints the following shape:



Or

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Q3) Write a Python program that create a lambda function to adds 15 to a given number passed in as an argument,

Q4)Write a Python program that create a lambda function to subtract two numbers and print the result.

Q5: Write a Python program that create a lambda function for calculating the following equation:

Sphere volume (4/3 π r3)

Q1)

def factorial(x):  
 if x == 1: # This is the base case  
 return 1  
  
 else: # This is the recursive case  
 return(x \* factorial(x-1))  
  
print(factorial(4))

Q2)

def pattern(num):  
 if num ==0:  
 return  
 else:  
 pattern(num-1)  
 print('\* '\* num)  
  
  
  
  
pattern(6)

Q3) Solution:

|  |
| --- |
| r = lambda a : a + 15  print(r(10)) |

Q4)Solution:

|  |
| --- |
| r = lambda x, y : x – y  x=float(input("Enter any numbers"))  y= float(input("Enter any numbers"))  print(r(x, y)) |

Q5) Solution:

|  |
| --- |
| Area=lambda radius: 4.0/3.0 \* 3.14 \* radius\* radius \* radius  r=float(input("Enter the radius of the sphere: "))  print("The volume is: ",end='')  print(Area(r)) |