**Chapter 10**

**10a** Write a program to display the following pyramid. The number oflines in the pyramid should not be hard-coded. It should be obtained from the user. The pyramid should appear as close to the center of the screen as possible.

**Objectives:**

1. To learn about python as scripting option.

**Theory:**

Subprocess Management:

The [subprocess](https://docs.python.org/2/library/subprocess.html" \l "module-subprocess) module allows you to spawn new processes, connect to their input/output/error

pipes, and obtain their return codes. This module intends to replace several older modules and

functions:

os.system

os.spawn\*

os.popen\*

popen2.\*

commands.\*

Using the subprocess module:

The recommended way to launch subprocesses is to use the following convenience functions. For more advanced use cases when these do not meet your needs, use the underlying [Popen](https://docs.python.org/2/library/subprocess.html" \l "subprocess.Popen) interface.

subprocess.call(args, \*, stdin=None, stdout=None, stderr=None, shell=False)

Run the command described by args. Wait for command to complete, then return the returncode attribute.

The arguments shown above are merely the most common ones, described below in Frequently Used Arguments (hence the slightly odd notation in the abbreviated signature). The full function

signature is the same as that of the [Popen](https://docs.python.org/2/library/subprocess.html" \l "subprocess.Popen) constructor - this functions passes all supplied arguments directly through to that interface.

**Program:**

import os

rows, columns = os.popen('stty size', 'r').read().split()

r=int(rows)

c=int(columns)

n = int(input("Enter number of rows:"))

for i in range(int(r/2-n/2)):

print()

for i in range(n):

for k in range(int(c/2)-int(n/2)):

print(" ",end="")

for k in range(n-i-1):

print(" ",end="")

for k in range(2\*i+1):

print("\*",end="")

print("\n",end="")

for i in range(int(r/2-n/2)):

print()

**Output:**

Enter number of rows:6

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**Conclusion:**

1.Basics of python like the concept of loops learnt.

2.Conditional statements learnt.

**References:**

[1] https://docs.python.org/3/