Python:As a scripting language

Subject:- Unix Operating System

System Lab Class :- TYIT

Name PRN

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Assignment No 10a

Title- Write a program to display the following pyramid. The number of lines 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.

Objective:

1. To learn about fundamentals of IPC through C socket programming.
2. Learn and understand the OS intraction with socket programming.
3. Use of system call and IPC mechanism to write effective application programs.
4. To know the port numbersing and process relation
5. To knows the iterative and concurrent server concept

Theory:

Subprocess Management:

The 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 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 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
 *
 ***
 *****
 *******
 *********
 ***********
```

Conclusion-

1. .Basics of python like the concept of loops learnt
2. .Conditional statements learn

Reference-

https://docs.python.org/3/