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Q1:

this program give us a triangle

```python
num = int(input('enter number'))
for i in range(num):
    for j in range(i+1):
        print('*',end="")
    print()
```

output:

```
enter number5
*
**
***
****
*****
```

Code:

```python
num = int(input('enter number'))
for i in range(num,0,-1):
    for j in range(i):
        print('*',end="")
    print()
```

output:

```
enter number4
****
***
**
*
```

Code:

```python
num = int(input('enter number'))
for i in range(0,num):
    for j in range(i):
        print(' ',end="")
    for k in range(num,i,-1):
        print('*',end='')
    print()
```
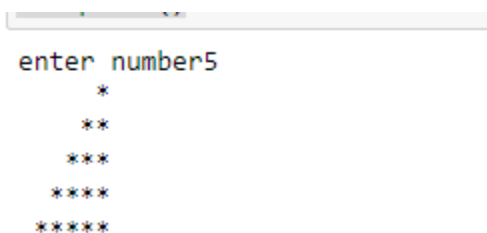
output:

```
enter number5
*****
 ****
  ***
   **
    *
```

Code:

```python
num = int(input('enter number'))
for i in range(num,0,-1):
    for j in range(i):
        print(' ',end="")
    for k in range(i,num+1):
        print('*',end='')
    print()
```

ouput:

```
enter number5
    *
   **
  ***
 ****
*****
```

Q2:

```python
# this programs builds a piramid for user using desire symbols
symbol = input("enter your desire symbol")
num = int(input('enter number'))
for i in range(num+1):
    for j in range(i+1):
        print(symbol,end="")
    print()
for i in range(num,0,-1):
    for j in range(i):
        print(symbol,end="")
    print()
```

output:

```
enter your desire symbol%
enter number4
%
%%
%%%
%%%%
%%%%%
%%%%
%%%
%%
%
```

Q3:

```python
# this programs calculate the average numbers for a student
counter = 1
Counter = 1
for i in range(3):
    Sum = 0
    sName = input('enter name of student{}:'.format(counter))
```

```python
    for j in range(3):

        score = int(input('Enter score{}:'.format(Counter)))

        Counter+=1

        Sum += score

    print('Name:',sName)

    print('Average: ',round(Sum/3,2))

    Counter=1

    counter+=1
```

output:

```
enter name of student1:aixax
Enter score1:89
Enter score2:98
Enter score3:78
Name: aixax
Average:  88.33
enter name of student2:faixan
Enter score1:37
Enter score2:90
Enter score3:89
Name: faixan
Average:  72.0
enter name of student3:soma
Enter score1:45
Enter score2:76
Enter score3:78
Name: soma
Average:  66.33
```

EXTRA TASKS:

Q1:

```python
# this programs build a piramid for user

num = int(input('enter number of rows:'))

symbol = input('enter symbol:')
```

```python
for i in range(num,0,-1):

    for j in range(i):

        print(' ',end="")

    for k in range(i,num+1):

        print(symbol,end='')

# for i in range(num):

    for l in range(i,num):

        print(symbol,end="")

    print()
```

output:

```
enter number of rows:5
enter symbol:#
    #
   ###
  #####
 #######
#########
```

Q2;

this program builds us a diamond with our desirer rows and symbol

```python
num = int(input('enter number'))

symbol = input('enter symbol:')

for i in range(num,0,-1):

    for j in range(i):

        print(' ',end="")

    for k in range(i,num+1):

        print(symbol,end='')

    for l in range(i,num):

        print(symbol,end="")

    print()
```

```python
for i in range(num+1):
    for j in range(i):
        print(' ',end="")
    for k in range(num,i,-1):
        print(symbol,end='')
    for l in range(i,num+1):
        print(symbol,end="")
    print()
```

output:

```
enter number4
enter symbol:@
    @
   @@@
  @@@@@
 @@@@@@@
@@@@@@@@@
 @@@@@@@
  @@@@@
   @@@
    @
```