In [2]:
```
#Write a program in Python to produce Star triangle for any number n
print("Print equilateral triangle Pyramid using stars ")
size=int(input("Enter the Number"))
m = (2 * size) - 2
for i in range(0, size):
    for j in range(0, m):
        print(end=" ")
    m = m - 1
    for j in range(0, i + 1):
        print("* ", end=' ')
    print(" ")
```

```
Print equilateral triangle Pyramid using stars
        *
       *  *
      *  *  *
     *  *  *  *
    *  *  *  *  *
```

In [13]:
```
#Write a program to produce Fibonacci series using generator in Python
def fib(limit):
    a, b = 0, 1
    while a < limit:
        yield a
        a, b = b, a + b
x = fib(5)
print("\nUsing for in loop")
for i in fib(5):
    print(i)
```

```
Using for in loop
0
1
1
2
3
```

In [15]:
```
#Convert the following dictionary into two lists of country and medals. Agai
n convert them into
#list of (country,medals) . Finally convert the list of tuples into dictiona
ry again.
#golds = {"Italy": 12, "USA": 33, "Brazil": 15, "China": 27, "Spain": 19,\
#"Canada": 22, "Argentina": 8, "England": 29}
golds = {"Italy": 12, "USA": 33, "Brazil": 15, "China": 27, "Spain": 19,"Can
ada": 22, "Argentina": 8, "England": 29}
# Converting into list of tuple
list = [(k, v) for k, v in golds.items()]

# Printing list of tuple
print("DICTIONARY to list of TUPLES")
print(list)
def Convert(list, di):
    for a, b in list:
        di.setdefault(a, []).append(b)
    return di
dictionary = {}
print ("\nTUPLES to DICTIONARY: ",Convert(list, dictionary))
```

```
DICTIONARY to list of TUPLES
[('Italy', 12), ('USA', 33), ('Brazil', 15), ('China', 27), ('Spain', 19), ('
Canada', 22), ('Argentina', 8), ('England', 29)]

tuples to dictionary:  {'Italy': [12], 'USA': [33], 'Brazil': [15], 'China':
[27], 'Spain': [19], 'Canada': [22], 'Argentina': [8], 'England': [29]}
```

In [16]:
```
#Write a program to check a number and a string are palindrome or not withou
t using looping statement.
def pal(s):
    return s == s[::-1]
s= str(input("ENTER number or string: "))
a=pal(s)
if a:
    print("palindrome")
else:
    print("Not-Palindrome")
```

```
palindrome
```

In [17]:
```
golds = {"Italy": 12, "USA": 33, "Brazil": 15, "China": 27, "Spain": 19,"Can
ada": 22, "Argentina": 8, "England": 29}
golds1 = (sorted(golds.items()))
print(golds1)
```

```
[('Argentina', 8), ('Brazil', 15), ('Canada', 22), ('China', 27), ('England',
29), ('Italy', 12), ('Spain', 19), ('USA', 33)]
```

In [ ]:
```

```