In [1]:
```python
#Answer 1

i = 1
while i <= 10:
    print(i, end ="\t")
    i = i+1
```

```
1       2       3       4       5       6       7       8       9       10
```

In [2]:
```python
#Answer 2

for i in range(10):
    for j in range(10):
        if(i>j):
            print(" ", end =" ")
        else:
            print("*", end =" ")
    print()
```

```
* * * * * * * * * *
  * * * * * * * * *
    * * * * * * * *
      * * * * * * *
        * * * * * *
          * * * * *
            * * * *
              * * *
                * *
                  *
```

In [3]:
```python
#Answer 3

for i in range(10):
    for j in range(10-i):
        print(" ", end =" ")
    for k in range(2*i+1):
        print("*", end =" ")
    for l in range(10-i):
        print(" ", end =" ")
    print()
```

```
                    *
                  * * *
                * * * * *
              * * * * * * *
            * * * * * * * * *
          * * * * * * * * * * *
        * * * * * * * * * * * * *
      * * * * * * * * * * * * * * *
    * * * * * * * * * * * * * * * * *
  * * * * * * * * * * * * * * * * * * *
```

In [1]:
```python
#Answer 4

for i in range(10):
    for j in range(10-i-1):
        print(" ", end ="")
    for k in range(2*i+1):
```

```python
        print("*", end ="")
    for l in range(10-i-1):
        print(" ", end ="")
    print()

for i in range(9):
    for j in range(i+1):
        print(" ", end ="")
    for k in range(2*(9-i)-1):
        print("*", end ="")
    for l in range(i+1):
        print(" ", end ="")
    print()
```

```
        *
       ***
      *****
     *******
    *********
   ***********
  *************
 ***************
*****************
 ***************
  *************
   ***********
    *********
     *******
      *****
       ***
        *
```

In [2]:
```python
#Answer 5

import random

number = random.randint(0,1000)
guesses = 0

print("Guess the number")

while guesses < 20:
    guess = int(input())
    guesses = guesses+1
    if guess < number:
        print("Try a bigger number")
    if guess > number:
        print("Try a smaller number")
    if guess == number:
        print("Bingooo!!")
        break

if guesses < 10:
    print("wonderful job")
elif guesses < 20:
    print("Good job")
else:
    print("Try to do better next time")
```

```
Guess the number
230
Try a bigger number
500
Try a smaller number
900
Try a smaller number
700
Try a smaller number
300
Try a bigger number
400
Try a smaller number
350
Try a bigger number
370
Try a smaller number
360
Try a smaller number
355
Try a smaller number
352
Try a smaller number
351
Bingooo!!
Good job
```

In [ ]: