```
In [286]:
```

```
import random
import time
import sys
f = open('file.txt','w')
```

The total area of the Map

```
In [287]:
```

```
length = 50
width = 50

size = length*width
walks = True
```

Define a list that will store values for dungeon. We start with an empty list so that we can populate it later.

```
In [288]:
grid = []
```

Define the number of walkers that will walk through and carve out our dungeon.

```
In [289]:
```

```
walkerNum = 1
maxSteps = 1000
```

```
In [290]:
```

```
for i in range(0,size-1):
    grid.append('_')
```

Define a new function that returns a random position for each worker. We will call this from the main function -- once we have one. rollPos - defines the first grid rollPos2 - defines the second grid

```
In [291]:
```

```
def rollPos():
    random.seed(time.time())
    pos = [2,0]
    return pos

def rollPos2():
    random.seed(time.time())
    pos = [4,0]
    return pos
```

Here we are making a grid, leaving no spaces

```
In [292]:
```

```
def getDirection():
   move = [0,1]
   return move
```

Next we will decide where each walker will walk -- and then we will "clear" the new position value in our array. This takes a little bit of calculation in order to determine where in the 1-D array the walker is given two dimensional space.

In case of making a grid, we are making it move in one direction

In [293]:

```
def walker(position):
    for steps in range(0,maxSteps):
        position[0] += getDirection()[0]
        position[1] += getDirection()[1]

    if position[0] > 1 and position[0] < length-2 and position[1] >1 and position[1] < width-1:
        r = position[0]*(length)+position[1]
        grid[r] = 'O'</pre>
```

we are calling walker() twice with wpos & wpos2 wpos = grid 1 wpos2 = grid 2

```
In [294]:
if walks == True:
    wpos = rollPos()
    wpos2 = rollPos2()
    for i in range(0, walkerNum):
        walker(wpos)
        walker(wpos2)
In [295]:
grid = str(grid).strip("[]")
grid = grid.replace(',',')
grid = grid.replace("'",'')
grid = grid.replace(' ','')
In [296]:
j=0
In [297]:
for i in range(0,size-1):
    f.write(grid[i])
    j = j+1
    if j == width:
        f.write('\n')
        j=0
In [298]:
print("DONE!")
DONE!
In [ ]:
In [ ]:
```