Quiz 3

COMP9021 Principles of Programming

2017 session 2

Sample outputs

```
$ python quiz_3.py
Enter three nonnegative integers: 0 1 2
Here is the grid that has been generated:
    1 1
    0 1
$ python quiz_3.py
Enter three nonnegative integers: 0 1 3
Here is the grid that has been generated:
    1 1 0
    1 1 1
    1 1 1

For steps of size 2, we have:
     2 stairs with 1 step
$ python quiz_3.py
Enter three nonnegative integers: 0 3 9
Here is the grid that has been generated:
    1 1 0 1 1 1 1 1 1
    1 1 1 1 0 1 1 1 0
    0 1 1 0 1 1 1 1 1
    1 1 0 0 0 1 0 1 1
    1 1 0 1 1 1 1 1 0
    0 1 1 0 1 1 0 1 1
    1 1 0 1 1 1 1 1 1
    1 0 1 1 0 0 1 1 0
    0 1 1 1 1 1 1 1 1

For steps of size 2, we have:
     5 stairs with 1 step
     1 stair with 2 steps
     1 stair with 3 steps
     1 stair with 4 steps

For steps of size 3, we have:
     4 stairs with 1 step
```

i, j = 1, 1

② $ python quiz_3.py
Enter three nonnegative integers: 0 3 7
Here is the grid that has been generated:

```
    3 4 5 6
i→ 1 1 1 0 1 1 1 1    Size 2   range (6- size×2)
   1 1 1 1 1 1 1 0
 2 1 1 1 0 0 1 1
 3 0 1 1 1 1 1 1    Size 3  range (6-Sz
 4 1 0 0 0 1 0 1
 5 1 1 1 0 1 1 1
 6 1 1 0 0 1 1 0
```

var   not in used.   dim = 7
1.2   Sz = 3

For steps of size 2, we have: 1 + 3
     2 stairs with (1 step)   j = 4
     2 stairs with 2 steps

                                             4, (4+3)
For steps of size 3, we have:
     1 stair with 2 steps
$ python quiz_3.py
Enter three nonnegative integers: 0 4 8
Here is the grid that has been generated:
```
1 1 0 1 1 1 1 1
1 1 1 1 1 1 1 1
0 1 1 1 1 1 1 0
0 1 1 1 0 1 1 1
1 1 1 1 1 1 1 0
1 0 0 1 0 1 1 1
1 1 0 1 1 1 1 1
1 1 0 0 1 1 1 0
```

                                        j in range (j)
For steps of size 2, we have: (j+1), j+sz)
     7 stairs with 1 step
     3 stairs with 2 steps
     2 stairs with 3 steps

For steps of size 3, we have:
     2 stairs with 1 step
     1 stair with 2 steps

For steps of size 4, we have:
     1 stair with 1 step

```
$ python quiz_3.py
Enter three nonnegative integers: 0 5 9
Here is the grid that has been generated:
    1 1 0 1 1 1 1 1 1
    1 1 1 1 1 1 1 0 1
    1 1 1 1 1 1 0 1 0
    1 1 1 1 0 1 1 1 1
    1 1 1 1 1 1 1 0 1
    0 0 1 1 1 1 1 0 1
    1 1 1 1 1 1 0 1 1
    1 1 1 1 1 0 0 1 1
    1 0 1 1 1 1 0 1 1

For steps of size 2, we have:
    4 stairs with 1 step
    5 stairs with 2 steps
    1 stair with 3 steps
    2 stairs with 4 steps

For steps of size 3, we have:
    9 stairs with 1 step

For steps of size 4, we have:
    2 stairs with 1 step
```