

# Random Walk Problem

## Code:

```
import random
def random_walk(n):
    x = 0
    y = 0
    for i in range(n):
        step = ""
        RN = random.randint(1, 10)
        if 0 < RN < 3:
            step = "UP"
        elif 3 < RN < 6:
            step = "Down"
        elif 5 < RN < 8:
            step = "RIGHT"
        elif 7 < RN < 10:
            step = "LEFT"

        if step == "UP":
            y += 1
        elif step == "DOWN":
            y -= 1
        elif step == "RIGHT":
            x += 1
        elif step == "LEFT":
            x -= 1
    return (x, y)

for i in range(20):
    print(random_walk(15))
```

## output:

✓ `import random ...`

(1, 3)  
(-3, 4)  
(3, 2)  
(-1, 2)  
(0, 1)  
(4, 2)  
(3, 5)  
(-4, 1)  
(2, 2)  
(1, 5)  
(-2, 4)  
(-3, 2)  
(3, 3)  
(-1, 3)  
(2, 4)  
(3, 4)  
(2, 2)  
(3, 2)  
(0, 2)  
(-2, 3)