

Ejerciciospdf

April 22, 2018

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In [1]: #Ejercicio 12
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In [2]: def moneda_trucada(p):  
        if random() < p:  
            return 0  
        return 1
```

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In [58]: res = 0  
        for int in xrange(1000):  
            for i in xrange(100):  
                if moneda_trucada(0.1) == 0:  
                    break  
            if i == 99:  
                res = res + 1  
        print res/1000
```

0

```
In [53]: #Ejercicio 13
```

```
Out[53]: 1
```

```
In [93]: def coprimos_aleatorios(N):  
        a = randint(2,N)  
        b = randint(2,N)  
        return a,b,gcd(a,b)
```

```
In [95]: def comprobar_coprimos(N):  
        res = 0  
        for int in xrange(10000):  
            a,b,mcm = coprimos_aleatorios(N)  
            if mcm == 1:  
                res = res + 1  
        return res,(res/10000).n()
```

```
In [98]: for i in xrange(2,11):  
        print comprobar_coprimos(10^i)
```

```
(6036, 0.6036000000000000)
(5998, 0.5998000000000000)
(6048, 0.6048000000000000)
(6070, 0.6070000000000000)
(6229, 0.6229000000000000)
(6088, 0.6088000000000000)
(6091, 0.6091000000000000)
(6052, 0.6052000000000000)
(6043, 0.6043000000000000)
```

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In [99]: #Ejercicio 14
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In [ ]:
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