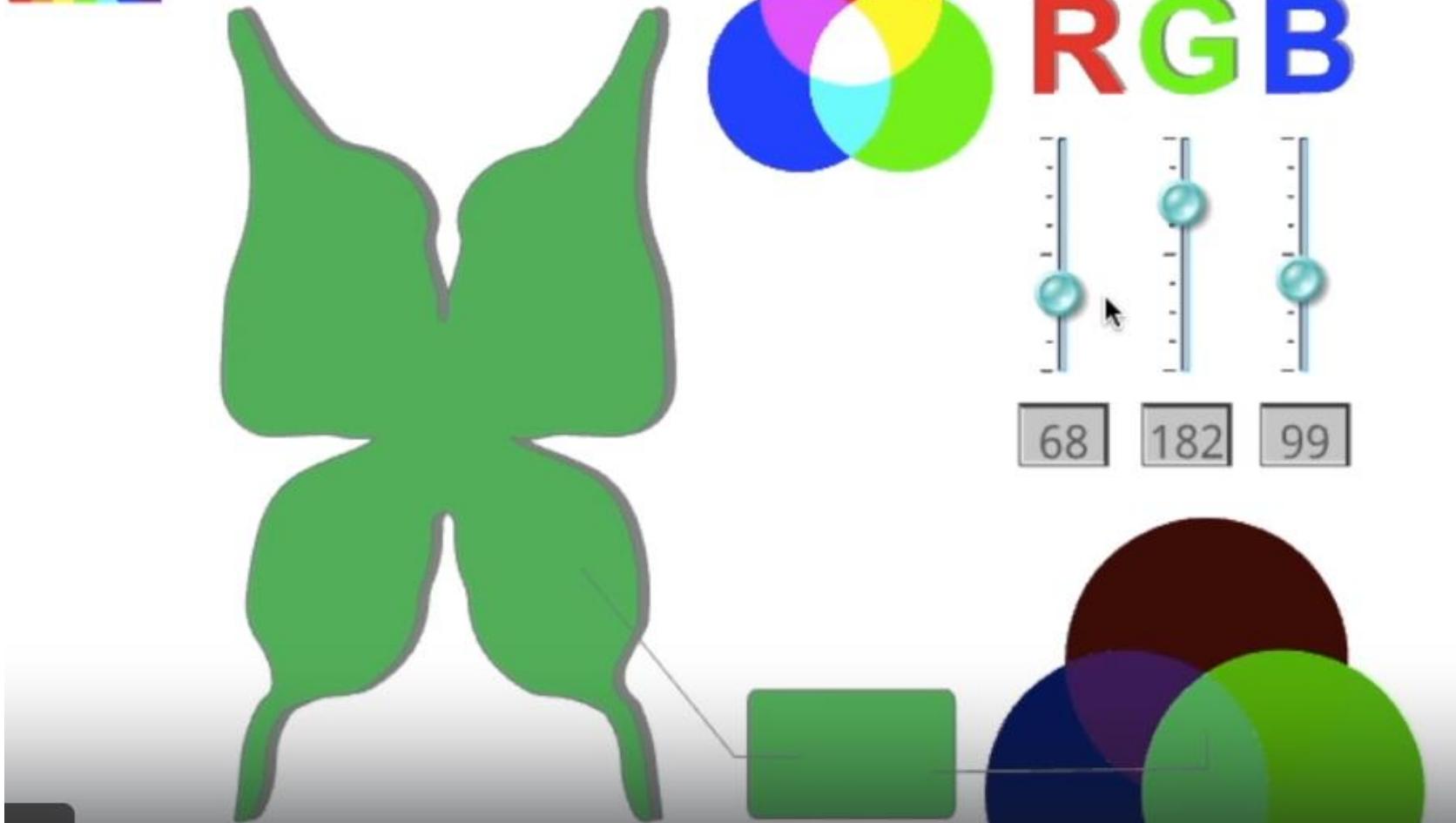
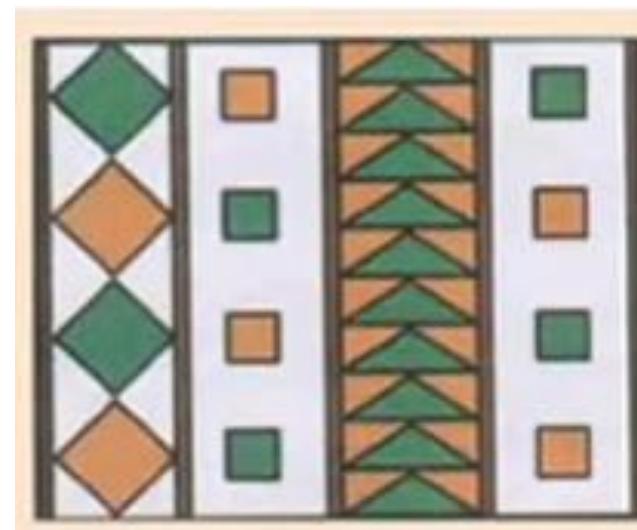
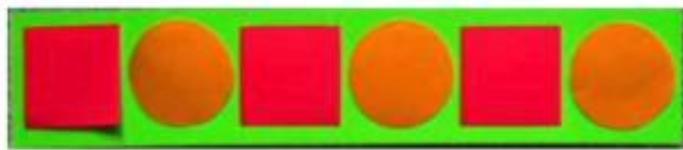


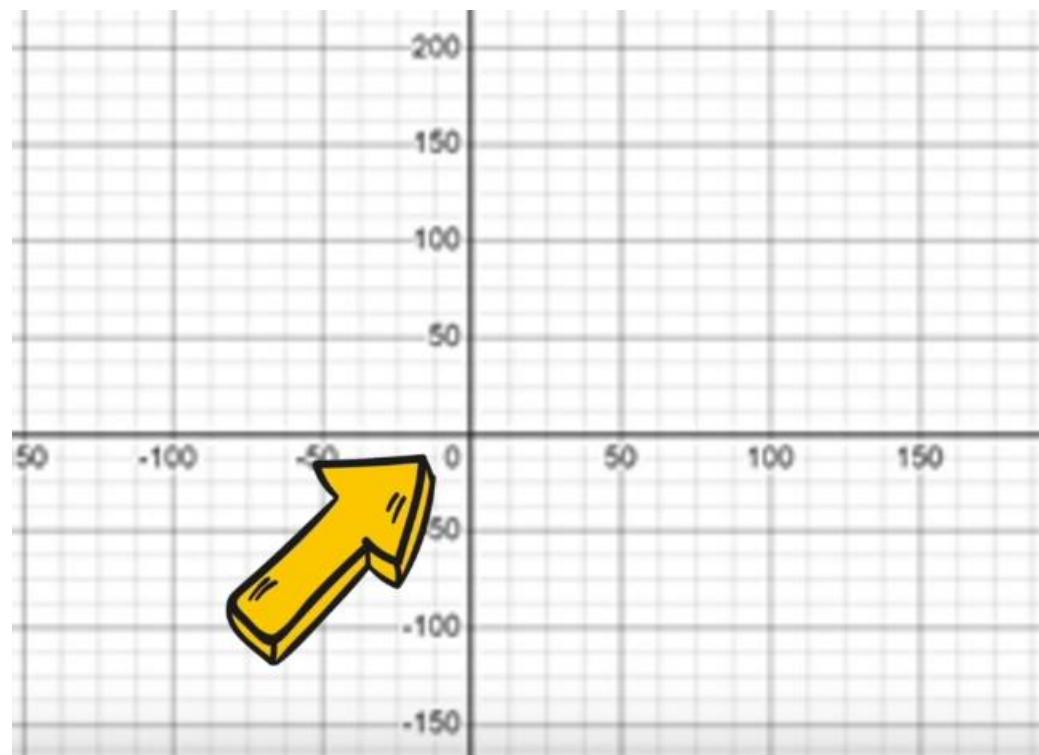
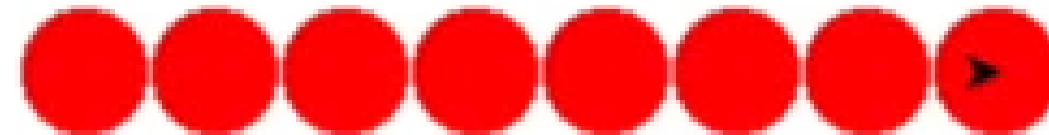
Применение процедур и циклов.



Круги и циклы

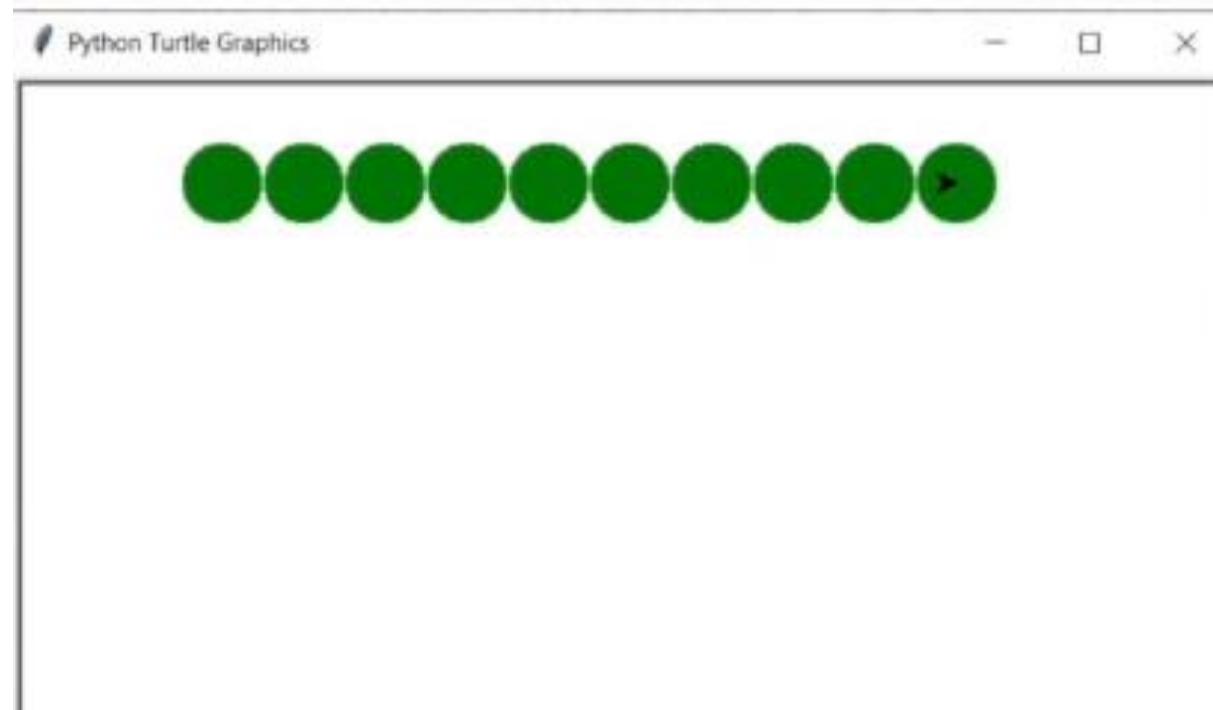


Построить ряд

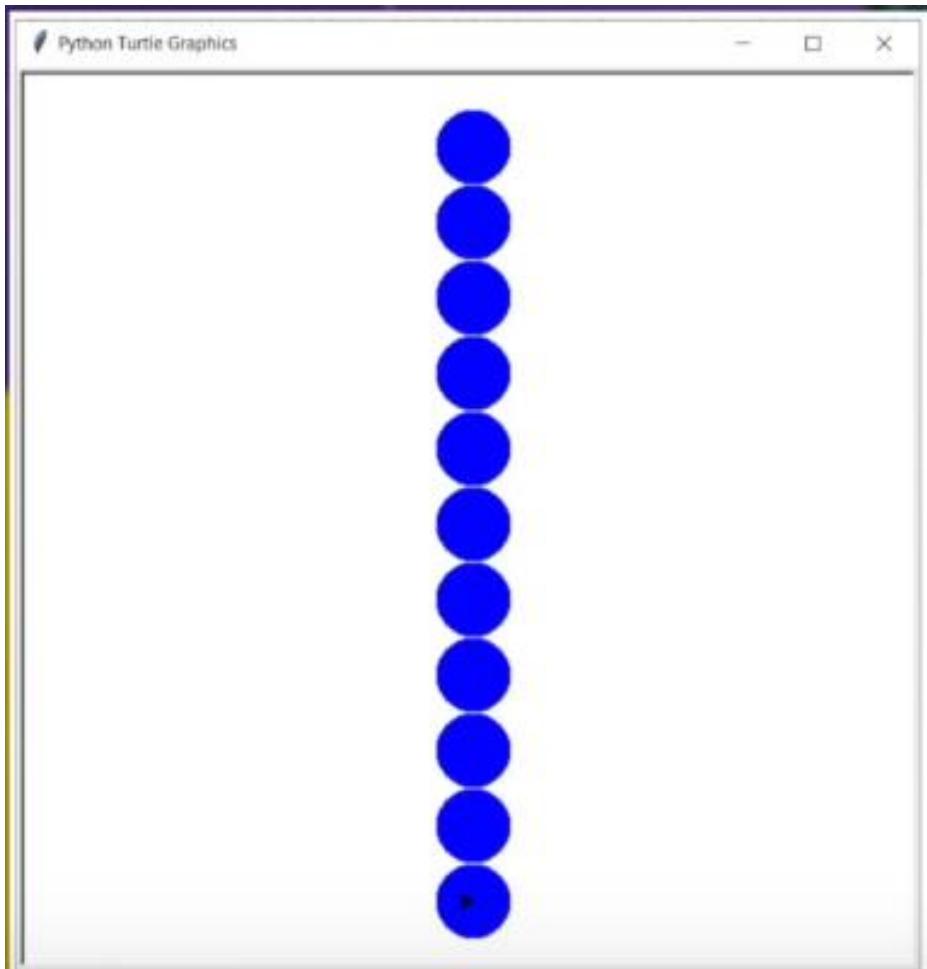


```
from turtle import *
setup (600,600)
x = -200
y = 0
d = 40
up ()
for i in range (8):
    goto(x, y)
    dot(d, "red")
    x = x + d
```

Измените программу

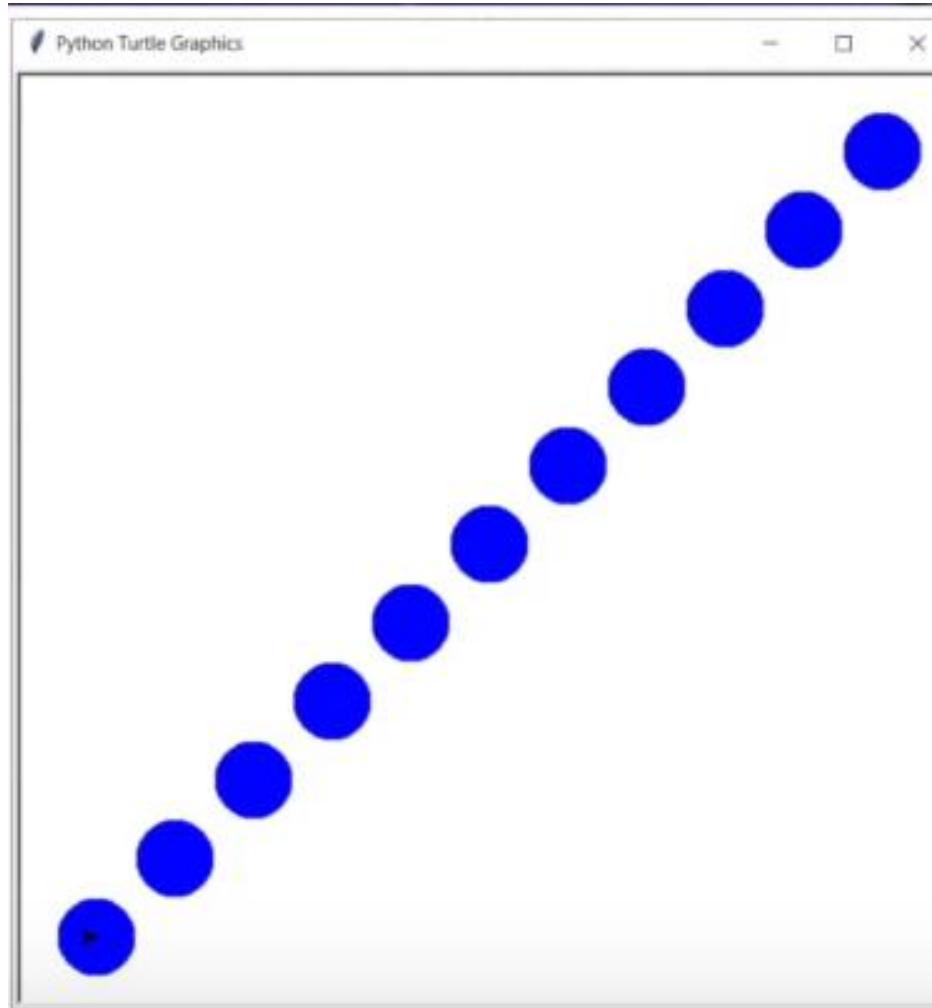


Если изменять координату у в цикле?



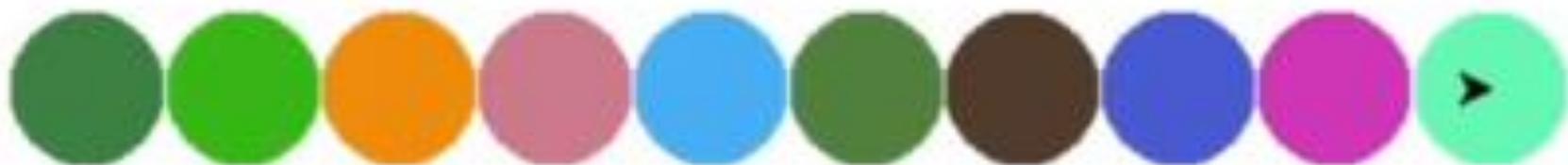
```
from turtle import *
setup (600,600)
x=0
y=250
d=50
up()
for i in range (11):
    goto(x,y)
    dot(d, 'blue')
    y= y - 50
```

Если изменять обе координаты в цикле ?



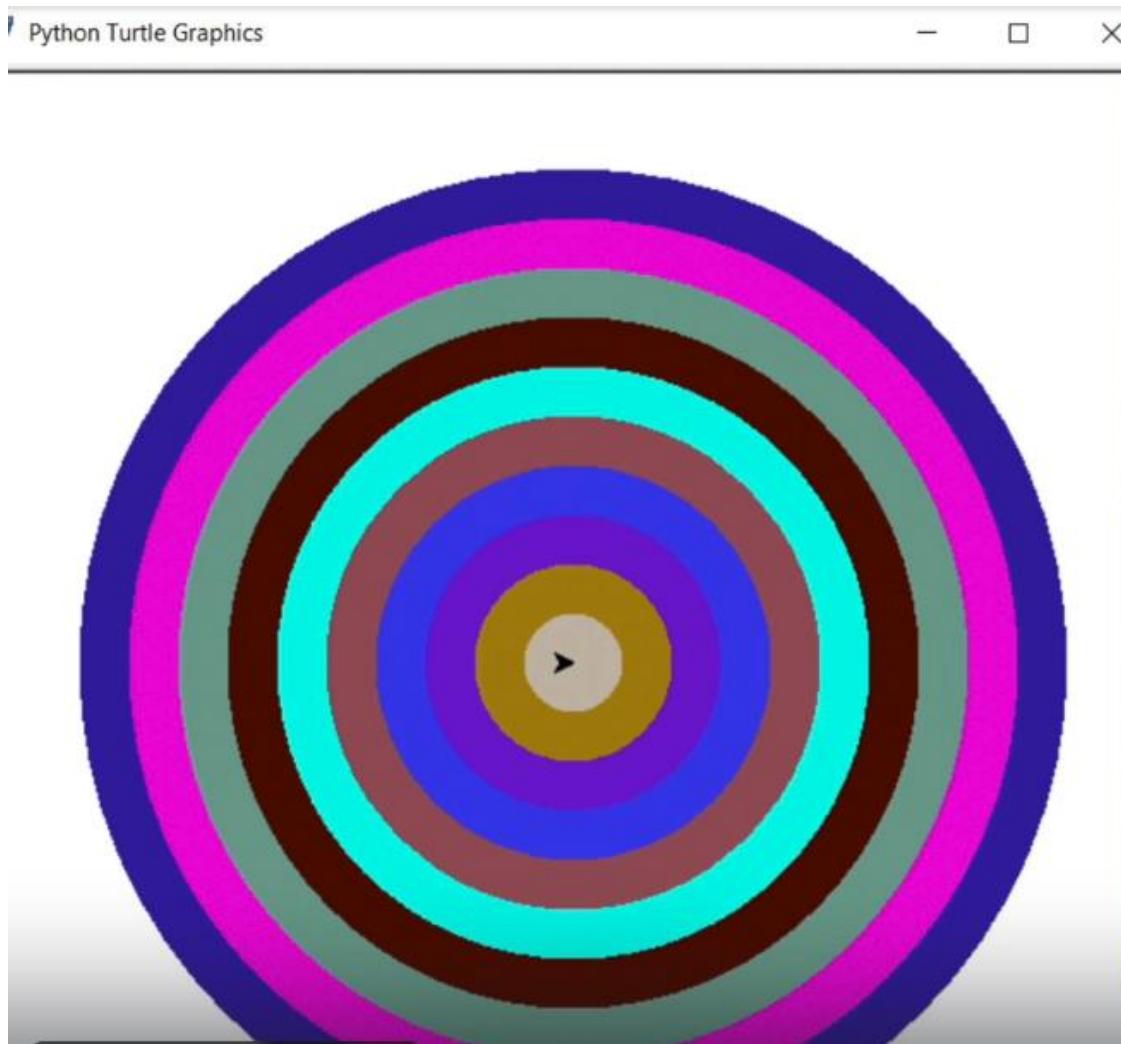
```
from turtle import *
setup (600,600)
x=250
y=250
d=50
up()
for i in range (11):
    goto(x,y)
    dot(d,'blue')
    x = x - 50
    y = y - 50
```

Можно сделать круги разноцветными?



```
from turtle import *
from random import *
setup (600,600)
x=-200
y=0
d=50
up()
colormode(255)
for i in range (10):
    r = randint (0,255)
    g = randint (0,255)
    b = randint (0,255)
    goto(x,y)
    dot(d,(r,g,b))
    x = x + d
```

Концентрические круги



```
from turtle import *
from random import *
setup (600,600)
x=0
y=0
d=500
up()
colormode(255)
for i in range (10):
    r = randint (0,255)
    g = randint (0,255)
    b = randint (0,255)
    goto(x,y)
    dot(d,(r,g,b))
    x = x + d
```

Самостоятельно

