turtle Module

turtle Module – built in module used to draw graphics

```
import turtle
```

#Step 1: **Import** the turtle module

Save As: turtlemod.py

Setup turtle commands

Command	Action
turtle.bgcolor(“color”)	Changes **background color** of the graphic window
turtle.title(“Title”)	**Window name**
turtle.color(“color”)	Change **pen color** to “colorName”
turtleName.color(“color”)	
turtle.shape(“____”)	“arrow”, “turtle”, “circle”, “square”, “triangle”, “classic”
turtleName.shape(“____”)	

```
import turtle
```

#Step 1: **Import** the turtle module

```
turtle.bgcolor("color")
turtle.title("Enter Window Title")
```

#Step 2: **Setup the window**

-background color

-window title bar

```
import turtle                                   #Step 1: Import the turtle module

turtle.bgcolor("aqua")                          #Step 2: Setup the window
turtle.title("My Turtle Window")

turtleName = turtle.Turtle()                    #Step 3: Give your turtle object a name
```

```
import turtle                                   #Step 1: Import the turtle module

turtle.bgcolor("aqua")                          #Step 2: Setup the window
turtle.title("My Turtle Window")

turtleName = turtle.Turtle()                    #Step 3: Give your turtle object a name

add turtle commands here                        #Step 4: Draw using turtle commands.
add turtle commands here
add turtle commands here
```

Simple turtle commands

Move and Draw Commands	Action
turtle.circle(x)	Draws a circle with **(x as radius)**
turtle.forward(x)	Move forward **(x number of pixels)** distance
turtle.backward(x)	Move backward **(x number of pixels)** distance
turtle.right(x)	Rotate right **(x degrees)**
turtle.left(x)	Rotate left **(x degrees)**
turtle.done()	Will pause the program.
****Search Internet for more useful turtle commands**	

```
import turtle
#Set up the Turtle Window
turtle.bgcolor("aqua")
turtle.title("My Turtle Window")

#Turtle Commands
gigi = turtle.Turtle()
gigi.shape("turtle")
gigi.color("purple")

gigi.circle(100)

turtle.done()
```

#Step 1: **Import** the turtle module

#Step 2: **Setup the window**

#Step 3: Give your **turtle object a name**

#Step 4: Draw using **turtle commands**.

#Change the radius value to see the change.

#Step 5: **Pause** turtle program.

```
import turtle
#Set up the Turtle Window
turtle.bgcolor("aqua")
turtle.title("My Turtle Window")

#Turtle Commands
gigi = turtle.Turtle()
gigi.shape("turtle")
gigi.color("purple")
#gigi.circle(50)

gigi.forward(150)
gigi.left(90)
#add more commands here to draw a square
...
...
turtle.done()
```

#Step 1: **Import** the turtle module

#Step 2: **Setup the window**

#Step 3: Give your **turtle object a name**

#Step 4: Draw using **turtle commands**.

#Step 5: **Pause** turtle program.

Use a For Loop – to draw your square

```
import turtle

for varVal in range(#):
        add turtle command(s) here




turtle.done()
```

Some turtle method

METHOD	PARAMETER	DESCRIPTION
Turtle()	None	It creates and returns a new turtle object
forward()	amount	It moves the turtle forward by the specified amount
backward()	amount	It moves the turtle backward by the specified amount
right()	angle	It turns the turtle clockwise
left()	angle	It turns the turtle counter clockwise
penup()	None	It picks up the turtle's Pen
pendown()	None	Puts down the turtle's Pen
up()	None	Picks up the turtle's Pen
down()	None	Puts down the turtle's Pen
color()	Color name	Changes the color of the turtle's pen
fillcolor()	Color name	Changes the color of the turtle will use to fill a polygon
heading()	None	It returns the current heading
position()	None	It returns the current position
goto()	x, y	It moves the turtle to position x,y
begin_fill()	None	Remember the starting point for a filled polygon
end_fill()	None	It closes the polygon and fills with the current fill color
dot()	None	Leaves the dot at the current position
stamp()	None	Leaves an impression of a turtle shape at the current location
shape()	shapename	Should be 'arrow', 'classic', 'turtle' or 'circle'