3.04 Creating Methods

Pseudocode: Import turtle Draw hat function(x, y, size) Set position(x, y)Color light blue Begin fill For loop 3 Forward(size) left(120) End fill Draw head function Pen up Set position(x, y)Pen down Color khaki Begin fill Circle size End fill

Draw eye function

```
Pen up
       Set position(x, y)
       Pen down
       Color dark cyan
       Begin fill
       circle(size)
       End fill
Draw nose function
       Pen up
       Set position(x, y)
       Pen down
       Color peru
       Right 90
       Pen size 40
       Forward 25
       Right 90
       Circle 10, -195
Draw smile function
       Pen up
       Set position(x, y)
```

```
Right 90
       circle(40, 180)
Main function
       Define turtle
       Print Wizard Man
       Reference all functions
Code:
#Cole Current
#12/14/19
#Draw a wizard's face
import turtle
def drawHat(cole, x, y, size):
 cole.penup()
 cole.setpos(x, y)
 cole.pendown()
 cole.color("light blue")
 cole.begin_fill()
```

Pen down

Color peru

```
for index in range(3):
    cole.forward(size)
    cole.left(120)
 cole.end_fill()
def drawHead(cole, x, y, size):
 cole.penup()
 cole.setpos(x, y)
 cole.pendown()
 cole.color("khaki")
 cole.begin_fill()
 cole.circle(size)
 cole.end_fill()
def drawEye(cole, x, y, size):
 cole.penup()
 cole.setpos(x, y)
 cole.pendown()
 cole.color("dark cyan")
 cole.begin_fill()
 cole.circle(size)
 cole.end_fill()
```

```
def drawNose(cole, x, y):
 cole.penup()
 cole.setpos(x, y)
 cole.pendown()
 cole.color("peru")
 cole. right(90)
 cole.pensize(4)
 cole.forward(25)
 cole.right(90)
 cole.circle(10, -195)
def drawSmile(cole, x, y):
 cole.penup()
 cole.setpos(x, y)
 cole.pendown()
 cole.color("peru")
 cole.right(90)
 cole.circle(40, 180)
def main():
 cole = turtle.Turtle()
```

```
print("Wizard Man")

drawHat(cole, -70, 30, 140)

drawHead(cole, 0, -100, 75)

drawEye(cole, -25, -15, 10)

drawEye(cole, 25, -15, 10)

drawNose(cole, 0, 0)

drawSmile(cole, -35, -40)
```

Post Mortem Review:

What was the purpose of your program?

To draw a face using turtle graphics

How could you program be useful in the real world?

It could be use to make digital art

What is a problem you ran into and how did you fix it?

I didn't put the ending part of the main function (main()) and the program did not run

Describe one thing you would do differently the next time you write a program.

I would define the main function first and then create the functions one by one