**Exercise 1: Reeborg’s World**

Please submit your solution.

<https://reeborg.ca/reeborg.html?lang=en&mode=python&menu=worlds%2Fmenus%2Freeborg_intro_en.json&name=Maze&url=worlds%2Ftutorial_en%2Fmaze1.json>

 def turn\_right():

turn\_left()

turn\_left()

turn\_left()

while not at\_goal():

if right\_is\_clear():

turn\_right()

move()

elif front\_is\_clear():

move()

else:

turn\_left()

**Exercise 2: Drawing Shapes**

Write a function to draw a variety of geometric shapes (square, triangle, circle) using turtle.

 import turtle

def draw\_square():

    for \_ in range(4):

        turtle.forward(100)

        turtle.right(90)

def draw\_triangle():

    for \_ in range (3):

        turtle.forward(100)

        turtle.left(120)

def draw\_circle():

    turtle.circle(50)

turtle.speed(1)

draw\_square()

turtle.penup()

turtle.goto(150, 0)

turtle.pendown()

draw\_triangle()

turtle.penup()

turtle.goto(-150,0)

turtle.pendown()

draw\_circle()

turtle.done()

**Exercise 3: Custom Scene Creation**

**Create a turtle graphic program that draws a simple landscape scene (sky, sun, grass).**

 import turtle

def draw\_sky():

    turtle.penup()

    turtle.goto(-400, 200)

    turtle.pendown()

    turtle.begin\_fill()

    turtle.color('sky blue')

    for \_ in range(2):

        turtle.forward(800)

        turtle.right(90)

        turtle.forward(400)

        turtle.right(90)

    turtle.end\_fill()

def draw\_grass():

    turtle.penup()

    turtle.goto(-400, -200)

    turtle.pendown()

    turtle.begin\_fill()

    turtle.color('green')

    for \_ in range(2):

        turtle.forward(800)

        turtle.right(90)

        turtle.forward(400)

        turtle.right(90)

    turtle.end\_fill()

def draw\_sun():

    turtle.penup()

    turtle.goto(300, 50)

    turtle.pendown()

    turtle.color('yellow')

    turtle.begin\_fill()

    turtle.circle(75)

    turtle.end\_fill()

turtle.speed(5)

draw\_sky()

draw\_grass()

draw\_sun()

turtle.done()

**Exercise 4: Interactive Drawing Application**

Develop a simple drawing tool where users can draw on the screen using arrow keys to move the turtle.

 import turtle

def move\_forward():

    turtle.forward(10)

def turn\_left():

    turtle.left(10)

def move\_back():

    turtle.backward(10)

def turn\_right():

    turtle.right(10)

def clear\_screen():

    turtle.clear()

turtle.speed(0)

turtle.shape('turtle')

turtle.listen()

turtle.onkey(move\_forward, "Up")

turtle.onkey(move\_back, "Down")

turtle.onkey(turn\_left, "Left")

turtle.onkey(turn\_right, "Right")

turtle.onkey(clear\_screen, "c")

turtle.mainloop()