import RPi.GPIO as GPIO

import time

# Define GPIO pins for IR communication

IR\_TRANSMITTER\_PIN = 17

IR\_RECEIVER\_PIN = 18

# Set up GPIO mode and pins

GPIO.setmode(GPIO.BCM)

GPIO.setup(IR\_TRANSMITTER\_PIN, GPIO.OUT)

GPIO.setup(IR\_RECEIVER\_PIN, GPIO.IN)

def send\_ir\_message(message):

# Implement code to modulate and send IR message

# This will depend on the specific IR transmitter hardware

def receive\_ir\_message():

# Implement code to receive and demodulate IR message

# This will depend on the specific IR receiver hardware

try:

while True:

# Example: Send a message

send\_ir\_message("Hello, underwater world!")

# Wait for a short time before receiving

time.sleep(1)

# Example: Receive a message

received\_message = receive\_ir\_message()

print("Received message:", received\_message)

except KeyboardInterrupt:

# Clean up GPIO on Ctrl+C exit

GPIO.cleanup()