**TRANSMITTER CODE**

#include <RH\_ASK.h>

#include <SPI.h> // Required by RH\_ASK

RH\_ASK motor;

void setup() {

Serial.begin(9600);

if (!motor.init()) {

Serial.println("Radio not initialized");

}

}

void loop() {

if (Serial.available()) {

String input = Serial.readStringUntil('\n');

input.trim();

if (input.length() > 0) {

const char \*msg = input.c\_str(); // FIXED: use c\_str()

motor.send((uint8\_t \*)msg, strlen(msg));

motor.waitPacketSent();

Serial.print("Message sent: ");

Serial.println(msg);

delay(1000);

}

}

}

**RECIEVER CODE**

#include <RH\_ASK.h>

#include <SPI.h>

RH\_ASK motor(2000, 5, 6, 7); // Speed, RX, TX, PTT

const int mp = 2;

const char \*on = "O"; // Use double quotes for string literals

const char \*off = "F";

void setup() {

pinMode(mp, OUTPUT);

Serial.begin(9600); // You forgot to initialize Serial

if (!motor.init()) {

Serial.println("Radio init failed");

}

}

void loop() {

uint8\_t buf[3]; // Big enough for "O"/"F" + null

uint8\_t buflen = sizeof(buf); // FIXED: typo was 'unit8\_t'

if (motor.recv(buf, &buflen)) { // FIXED: was 'rec', should be 'recv'

buf[buflen] = '\0'; // Null-terminate the string

if (strcmp((char \*)buf, on) == 0) {

digitalWrite(mp, HIGH);

} else if (strcmp((char \*)buf, off) == 0) {

digitalWrite(mp, LOW);

}

Serial.print("Received: ");

Serial.println((char \*)buf);

}

}

AIM :

To write a transmitting code to transmit a message from transmitter to receiver to turn on the motor or to turn off the motor

THOUGHT PROCESS:

The idea was to transmit a basic message like on or off to the transmitter which should turn on or turn off the motor so for the transmitter I used pin 11 and for the receiver I used pin 12 and I connected the transmitter and receiver to the Arduino so I can send the commands to the motor to either rotate or stop rotating.

EXPLANATION:

For the transmitter code I used the library files rh\_ask.h and spl.h which are used to work with the components serial begin is used to setup the monitor. Monitor.init() is used to initialise the motor RH\_ASK motor creates an object called motor in the loop iam dynamically taking the input from the user and storing it in a string(input) and then Iam converting it into a char with the command input.c\_str(); and transmitting it to the receiver using motor.send((char \*)msg, sizeof(msg)) command and I used a if block to make sure I entered something before I executed next block of code in which the command motor.send() is used to wait then I printed a message received followed by the character I entered

In the receiver circuit I used the same setup and in the loop I declared a char array to store the received char which will what to do with the motor for this I used the command motor.recv((char\*)msg,sizeof(msg)) then I already declared some chars on and off so I use strcmp() function to compare these already declared characters with the ones I received from the transmitters depending on which I turn on or off the motors by using digitalWrite function

SOURCES ;

https://stackoverflow.com/questions/71480747/using-an-rf-module-to-control-a-motor-with-arduino