```
import cv2
import mediapipe as mp
import numpy as np
import streamlit as st
from gtts import gTTS
mp hands = mp.solutions.hands
hands = mp_hands.Hands(max num hands=1)
mp draw = mp.solutions.drawing utils
def detect gesture(landmarks):
            thumb tip = landmarks[4][1]
             index tip = landmarks[8][1]
            middle tip = landmarks[12][1]
            ring t\bar{i}p = landmarks[16][1]
            pinky_tip = landmarks[20][1]
            wrist y = landmarks[0][1]
            if index_tip > wrist_y and middle_tip > wrist_y and ring_tip > wrist_y and
pinky_tip > wrist y:
                         return "Ù,Ø"ضØ© ØŞÙ"يد"
             if index tip < wrist y and middle tip < wrist y and ring tip < wrist y and
pinky_tip < wrist y:</pre>
                         return "\dot{\mathbf{v}}_{f}\dot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}_{f}\ddot{\mathbf{v}}
             if thumb tip < wrist y and index tip > wrist y:
                         return "Ø¥Ø"Ù‡ØŞŪ... Ù"أعÙ"Ū..."
            return None
st.title("ŏŸ¤— ù...øªø±ø¬ù... ø¥ø′ø$ø±ø$øª ø$ù,,ùšø⁻")
run = st.checkbox('تشذÙŠÙ,, اÙ,,ÙfاÙ...يرا')
FRAME WINDOW = st.image([])
cap = cv2.VideoCapture(0)
while run:
            ret, frame = cap.read()
             if not ret:
                         break
             img rgb = cv2.cvtColor(frame, cv2.COLOR BGR2RGB)
            results = hands.process(img rgb)
            gesture = None
             if results.multi hand landmarks:
                         for hand landmarks in results.multi hand landmarks:
                                     mp draw.draw landmarks(frame, hand_landmarks,
mp_hands.HAND_CONNECTIONS)
                                      h, w, _ = frame.shape
                                      landmarks = []
                                      for lm in hand landmarks.landmark:
                                                   landmarks.append((int(lm.x * w), int(lm.y * h)))
                                      gesture = detect_gesture(landmarks)
             if gesture:
                         cv2.putText(frame, gesture, (50, 50), cv2.FONT HERSHEY SIMPLEX,
                                                               1, (0, 255, 0), 2)
```

st.write("تÙ... اÙ,,تعرÙ[عÙ,,Ù‰:", gesture)

FRAME_WINDOW.image(cv2.cvtColor(frame, cv2.COLOR_BGR2RGB))

cap.release()