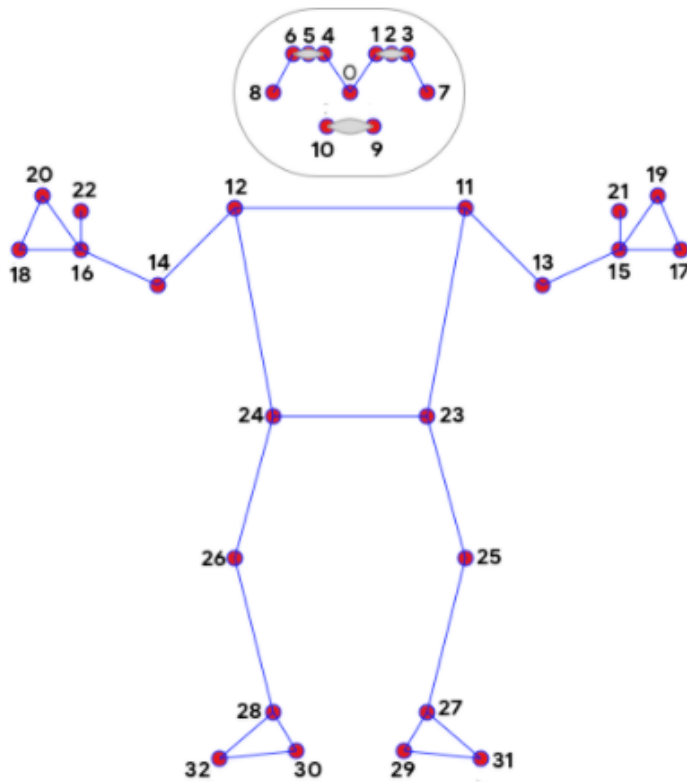


In [5]:

```
import cv2
import mediapipe as mp
```

In [6]:

```
mp_drawing = mp.solutions.drawing_utils
mp_pose = mp.solutions.pose
pose = mp_pose.Pose(min_detection_confidence=0.5, min_tracking_confidence=0.5)
```



- | | |
|--------------------|----------------------|
| 0. nose | 17. left_pinky |
| 1. left_eye_inner | 18. right_pinky |
| 2. left_eye | 19. left_index |
| 3. left_eye_outer | 20. right_index |
| 4. right_eye_inner | 21. left_thumb |
| 5. right_eye | 22. right_thumb |
| 6. right_eye_outer | 23. left_hip |
| 7. left_ear | 24. right_hip |
| 8. right_ear | 25. left_knee |
| 9. mouth_left | 26. right_knee |
| 10. mouth_right | 27. left_ankle |
| 11. left_shoulder | 28. right_ankle |
| 12. right_shoulder | 29. left_heel |
| 13. left_elbow | 30. right_heel |
| 14. right_elbow | 31. left_foot_index |
| 15. left_wrist | 32. right_foot_index |
| 16. right_wrist | |

In [12]:

```
cap = cv2.VideoCapture('test_video.mp4')
while cap.isOpened():
    # read frame
    _, frame = cap.read()
    try:
        # resize the frame for portrait video
        frame = cv2.resize(frame, (350, 600))
        # convert to RGB
        frame_rgb = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB)

        # process the frame for pose detection
        pose_results = pose.process(frame_rgb)

        # print(pose_results.pose_landmarks)

        # draw skeleton on the frame
        mp_drawing.draw_landmarks(frame, pose_results.pose_landmarks, mp_pose.POSE_CONNECTIONS)
        # display the frame
        cv2.imshow('Output', frame)
    except:
        break

    if cv2.waitKey(1) == ord('x'):
        break

cap.release()
cv2.destroyAllWindows()
```

In [10]:

```
# get landmark for a specific point
pose_results.pose_landmarks.landmark[2]
```

Out[10]:

```
x: 0.3880370259284973
y: 0.2901993691921234
z: -0.20075245201587677
visibility: 0.9999621510505676
```

In []:

In [11]:

```
cap = cv2.VideoCapture(0)
while cap.isOpened():
    # read frame
    _, frame = cap.read()
    try:
        # resize the frame for portrait video
        # frame = cv2.resize(frame, (350, 600))
        # convert to RGB
        frame_rgb = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB)

        # process the frame for pose detection
        pose_results = pose.process(frame_rgb)
        # print(pose_results.pose_landmarks)

        # draw skeleton on the frame
        mp_drawing.draw_landmarks(frame, pose_results.pose_landmarks, mp_pose.POSE_CONNECTIONS)
        # display the frame
        cv2.imshow('Output', frame)
    except:
        break

    if cv2.waitKey(1) == ord('q'):
        break

cap.release()
cv2.destroyAllWindows()
```

In []:

In []:

In []:

In []: