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PART 1:

- 1. Run the GStreamer shell script with the input video file: './run_gstreamer.sh <input_video.mp4> '
- 2. g++ -std=c++17 Compiler used.

PART 2:

- 1. Compile the application using 'make' command.
- 2. './face_detector' is the compiled and executable c++ file.
- 3. Run the application:
 - './face_detector <input_directory> <output_directory>'
- 4. XML Pre-trained Classifier used:

'haarcascade_frontalface_alt.xml'

<u>Input Dir: input_frames</u>
<u>Output Dir: output_faces</u>

Summary of Submission:

- 1. **Shell Script (run_gstreamer.sh):** For the GStreamer pipeline.
- 2. **Output of Part 1 (input_frames):** JPEG frames generated by the pipeline.
- 3. **C++ Application (face_detector.cpp):** For face detection and saving cropped faces.

- 4. **Compilation Script (Makefile):** For building the C++ application.
- 5. **Output of Part 2 (output_faces):** Directory structure with cropped faces.