CODE SNIPPET

Task 1.1

def count\_frames(count):

if count % 2 !=0:

cv2.imshow('flipped',flipVert)

else:

cv2.imshow('flipped',frame)

while True:

ret, frame = cap.read()

flipVert = cv2.flip(frame, 0)

count=count+1

count\_frames(count)

Task 1.2

def count\_frames(count):

if count % 2 !=0:

cv2.imshow('flipped',flipVert)

else:

cv2.imshow('flipped',frame)

while True:

ret, frame = cap.read()

flipVert = cv2.flip(frame, 1)

count=count+1

count\_frames(count)

Task 1.3

count = 0

def count\_frames(count):

if count % 5 ==0:

cv2.imshow('flipped',flipVert)

else:

cv2.imshow('flipped',frame)

while True:

ret, frame = cap.read()

flipVert = cv2.flip(frame, 0)

count=count+1

count\_frames(count)

MEANING AND USE

In a live feed, alternative frames have to be flipped and the output has to be simultaneous for original and flipped frames. For this, a function has to be defined that uses if else statement with odd even logic for each frame. The function is called inside the loop and desired output is achieved.

PROBLEMS FACED AND SOLUTIONS

* Used the flip function outside the while loop
  + SOL- Being a video, flipping has to be done frame wise and thus, flip function should belong in the loop
* Used ‘cap’ as src argument for flip function
  + SOL- Selected file has to be read first by the imread function and only then be used in the flip function. Replaced ‘cap’ by ‘frame’
* Initialized frame counter variable inside the user defined function
  + SOL- For the function to be able to perform the task on the count variable, it has to be initialized before the function definition
* Incremented the counter inside the user defined function itself
  + SOL- The counter has to be incremented in the while loop to be able to take each frame
* Placed user defined function under the while loop
  + SOL- Function only performs the if else loop using the counter. Only the function call has to be done in the while loop, function definition has to be done only once, outside the loop
* Named output files of original and flipped live feed separately and hence had two separate output windows; one original and one flipped
  + SOL- For alternate flipped frames, it has to be one single file satisfying the conditions of if else

APPROACH

* For feed to be flipped, the flip function has to be used
* Read documentation for syntax
* Since frames have to flipped alternatively, odd even can be a good idea
* To use the concept of odd even, if else statement has to be used
* If else can be used only on the number of frames
* To get number of the frames, counter has to be used
* A function has to be defined to use counter in the if else statement
* Trial and error, & debugging to get the final output