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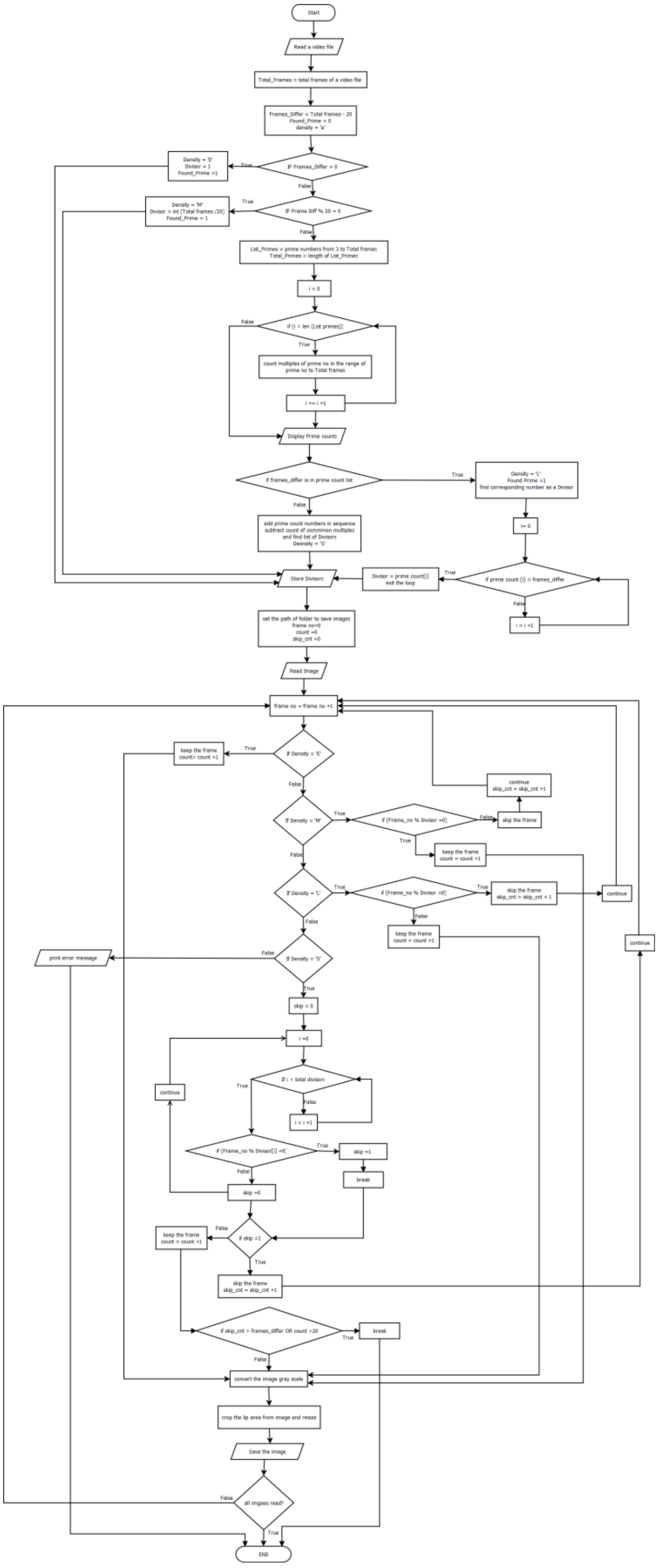
ANNEXURE –ViLiDEx Flowchart



Start
Read a video file
Total_Frames = total frames of a video file
Frames_Differ = Total frames - 20
Found_Prime = 0
density = 'e'
IF Frames_Differ = 0
True
Density = 'E'
Divisor = 1
Found_Prime =1
False
IF Frame Diff % 20 = 0
True
Density = 'M'
Divisor = int (Total frames /20)
Found_Prime = 1
False
List_Primes = prime numbers from 3 to Total frames
Total_Primes = length of List_Primes
i = 0
if (i < len (List primes))
False
True
count multiples of prime no in the range of prime no to Total frames
i += i +1
Display Prime counts
if frames_differ is in prime count list
True
Density = 'L'
Found Prime =1
find corresponding number as a Divisor
i= 0
if prime count [i] = frames_differ
True
Divisor = prime count[i]
exit the loop
False
i = i +1
False
add prime count numbers in sequence
subtract count of commmon multiples
and find list of Divisors
Deisnity = 'S'
Store Divisors
set the path of folder to save images
frame no=0
count =0
skip_cnt =0
Read Image
frame no = frame no +1
If Density = 'E'
True
keep the frame
count= count +1
False
If Density = 'M'
True
if (Frame_no % Divisor =0)
False
skip the frame
continue
skip_cnt = skip_cnt +1
True
keep the frame
count = count +1
False
If Density = 'L'
True
if (Frame_no % Divisor =0)
True
skip the frame
skip_cnt = skip_cnt + 1
continue
False
keep the frame
count = count +1
continue
False
If Density = 'S'
False
print error message
True
skip = 0
i =0
If i < total divisors
True
False
i = i +1
continue
if (Frame_no % Divisor[i] =0)
True
skip =1
break
False
skip =0
if skip =1
False
keep the frame
count = count +1
True
skip the frame
skip_cnt = skip_cnt +1
if skip_cnt > frames_differ OR count >20
True
break
False
convert the image gray scale
crop the lip area from image and resize
Save the image
all imgaes read?
False
True
END