In [4]:
```
from imageai.Classification import ImageClassification
from os import listdir
from os.path import isfile, join
import os

execution_path = os.getcwd()

prediction = ImageClassification()
prediction.setModelTypeAsResNet50()
prediction.setModelPath(os.path.join(execution_path, "resnet50_imagenet_tf.2.0.h5"))
prediction.loadModel()

execution_path += "\someFruits"
fileNames = [f for f in listdir(execution_path) if isfile(join(execution_path, f))]

for fileName in fileNames:
    predictions, probabilities = prediction.classifyImage(os.path.join(execution_path, f
    for eachPrediction, eachProbability in zip(predictions, probabilities):
            print(fileName[0:-4] + ' - ' + eachPrediction)
```

```
apple - Granny_Smith
bottle - beer_bottle
lemon - lemon
strawberry - strawberry
tomato - hair_slide
```

In [5]:
```
from imageai.Detection import VideoObjectDetection
import os

execution_path = os.getcwd()

detector = VideoObjectDetection()
detector.setModelTypeAsYOLOv3()
detector.setModelPath( os.path.join(execution_path , "yolo.h5"))
detector.loadModel()

video_path = detector.detectObjectsFromVideo(input_file_path=os.path.join(execution_path
                                output_file_path=os.path.join(execution_path, "movietask
                                             frames_per_second=30, log_progress=True)
print(video_path)
```

```
Processing Frame :  1
Processing Frame :  2
Processing Frame :  3
Processing Frame :  4
Processing Frame :  5
Processing Frame :  6
Processing Frame :  7
Processing Frame :  8
Processing Frame :  9
Processing Frame :  10
Processing Frame :  11
Processing Frame :  12
Processing Frame :  13
Processing Frame :  14
Processing Frame :  15
Processing Frame :  16
Processing Frame :  17
Processing Frame :  18
Processing Frame :  19
Processing Frame :  20
Processing Frame :  21
Processing Frame :  22
Processing Frame :  23
```

```
Processing Frame :  24
Processing Frame :  25
Processing Frame :  26
Processing Frame :  27
Processing Frame :  28
Processing Frame :  29
Processing Frame :  30
Processing Frame :  31
Processing Frame :  32
Processing Frame :  33
Processing Frame :  34
Processing Frame :  35
Processing Frame :  36
Processing Frame :  37
Processing Frame :  38
Processing Frame :  39
Processing Frame :  40
Processing Frame :  41
Processing Frame :  42
Processing Frame :  43
Processing Frame :  44
Processing Frame :  45
Processing Frame :  46
Processing Frame :  47
Processing Frame :  48
Processing Frame :  49
Processing Frame :  50
Processing Frame :  51
Processing Frame :  52
Processing Frame :  53
Processing Frame :  54
Processing Frame :  55
Processing Frame :  56
Processing Frame :  57
Processing Frame :  58
Processing Frame :  59
Processing Frame :  60
Processing Frame :  61
Processing Frame :  62
Processing Frame :  63
Processing Frame :  64
Processing Frame :  65
Processing Frame :  66
Processing Frame :  67
Processing Frame :  68
Processing Frame :  69
Processing Frame :  70
Processing Frame :  71
Processing Frame :  72
Processing Frame :  73
Processing Frame :  74
Processing Frame :  75
Processing Frame :  76
Processing Frame :  77
Processing Frame :  78
Processing Frame :  79
Processing Frame :  80
Processing Frame :  81
Processing Frame :  82
Processing Frame :  83
Processing Frame :  84
Processing Frame :  85
Processing Frame :  86
Processing Frame :  87
Processing Frame :  88
Processing Frame :  89
```

```
Processing Frame :  90
Processing Frame :  91
Processing Frame :  92
Processing Frame :  93
Processing Frame :  94
Processing Frame :  95
Processing Frame :  96
Processing Frame :  97
Processing Frame :  98
Processing Frame :  99
Processing Frame :  100
Processing Frame :  101
Processing Frame :  102
Processing Frame :  103
Processing Frame :  104
Processing Frame :  105
Processing Frame :  106
Processing Frame :  107
Processing Frame :  108
Processing Frame :  109
Processing Frame :  110
Processing Frame :  111
Processing Frame :  112
Processing Frame :  113
Processing Frame :  114
Processing Frame :  115
Processing Frame :  116
Processing Frame :  117
Processing Frame :  118
Processing Frame :  119
Processing Frame :  120
Processing Frame :  121
Processing Frame :  122
Processing Frame :  123
Processing Frame :  124
Processing Frame :  125
Processing Frame :  126
Processing Frame :  127
Processing Frame :  128
Processing Frame :  129
Processing Frame :  130
Processing Frame :  131
Processing Frame :  132
Processing Frame :  133
Processing Frame :  134
Processing Frame :  135
Processing Frame :  136
Processing Frame :  137
Processing Frame :  138
Processing Frame :  139
Processing Frame :  140
Processing Frame :  141
Processing Frame :  142
Processing Frame :  143
Processing Frame :  144
Processing Frame :  145
Processing Frame :  146
Processing Frame :  147
Processing Frame :  148
Processing Frame :  149
Processing Frame :  150
Processing Frame :  151
Processing Frame :  152
Processing Frame :  153
Processing Frame :  154
Processing Frame :  155
```

```
Processing Frame :  156
Processing Frame :  157
Processing Frame :  158
Processing Frame :  159
Processing Frame :  160
Processing Frame :  161
Processing Frame :  162
Processing Frame :  163
Processing Frame :  164
Processing Frame :  165
Processing Frame :  166
Processing Frame :  167
Processing Frame :  168
Processing Frame :  169
Processing Frame :  170
Processing Frame :  171
Processing Frame :  172
Processing Frame :  173
Processing Frame :  174
Processing Frame :  175
Processing Frame :  176
Processing Frame :  177
Processing Frame :  178
Processing Frame :  179
Processing Frame :  180
Processing Frame :  181
Processing Frame :  182
Processing Frame :  183
Processing Frame :  184
Processing Frame :  185
Processing Frame :  186
Processing Frame :  187
Processing Frame :  188
Processing Frame :  189
Processing Frame :  190
Processing Frame :  191
Processing Frame :  192
Processing Frame :  193
Processing Frame :  194
Processing Frame :  195
Processing Frame :  196
Processing Frame :  197
Processing Frame :  198
Processing Frame :  199
Processing Frame :  200
Processing Frame :  201
Processing Frame :  202
Processing Frame :  203
Processing Frame :  204
Processing Frame :  205
Processing Frame :  206
Processing Frame :  207
Processing Frame :  208
Processing Frame :  209
Processing Frame :  210
Processing Frame :  211
Processing Frame :  212
Processing Frame :  213
Processing Frame :  214
Processing Frame :  215
Processing Frame :  216
Processing Frame :  217
Processing Frame :  218
Processing Frame :  219
Processing Frame :  220
Processing Frame :  221
```

```
Processing Frame :  222
Processing Frame :  223
Processing Frame :  224
Processing Frame :  225
Processing Frame :  226
Processing Frame :  227
Processing Frame :  228
Processing Frame :  229
Processing Frame :  230
Processing Frame :  231
Processing Frame :  232
Processing Frame :  233
Processing Frame :  234
Processing Frame :  235
Processing Frame :  236
Processing Frame :  237
Processing Frame :  238
Processing Frame :  239
Processing Frame :  240
Processing Frame :  241
Processing Frame :  242
Processing Frame :  243
Processing Frame :  244
Processing Frame :  245
Processing Frame :  246
Processing Frame :  247
Processing Frame :  248
Processing Frame :  249
Processing Frame :  250
Processing Frame :  251
Processing Frame :  252
Processing Frame :  253
Processing Frame :  254
Processing Frame :  255
Processing Frame :  256
Processing Frame :  257
Processing Frame :  258
Processing Frame :  259
Processing Frame :  260
Processing Frame :  261
Processing Frame :  262
Processing Frame :  263
Processing Frame :  264
Processing Frame :  265
Processing Frame :  266
Processing Frame :  267
Processing Frame :  268
Processing Frame :  269
Processing Frame :  270
Processing Frame :  271
Processing Frame :  272
Processing Frame :  273
Processing Frame :  274
Processing Frame :  275
Processing Frame :  276
Processing Frame :  277
Processing Frame :  278
Processing Frame :  279
Processing Frame :  280
Processing Frame :  281
Processing Frame :  282
Processing Frame :  283
Processing Frame :  284
Processing Frame :  285
Processing Frame :  286
Processing Frame :  287
```

```
Processing Frame :  288
Processing Frame :  289
C:\Aprogramming\University\PythonPractice\task5\movietasklab5_new.avi
```

In [ ]: