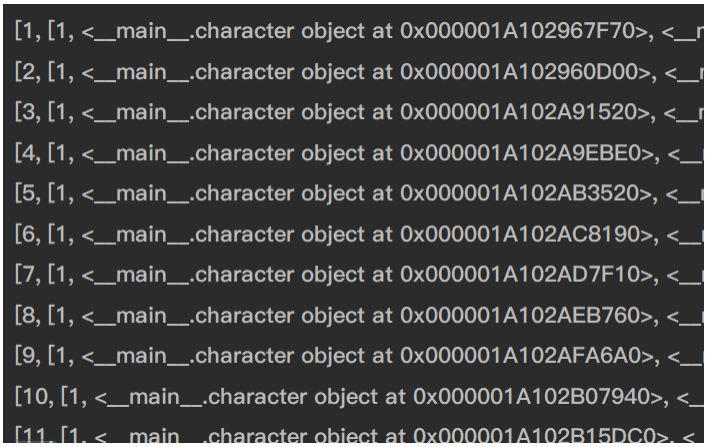
构建次级轨迹

更改了视频片段的划分方法

视频划分方法在实现次级轨迹时出现了问题，本次调整先划分帧，最后将帧组成段，将视频划分成以下格式：

存储格式：[[段数1，[帧数1，结构体1，结构体2，...]，[帧数2，结构体1，结构体2...] ...] , ... ,[段数k，[帧数1，结构体1，结构体2，...]，[帧数2，结构体1，结构体2...] ...]]

```
allframes = []
part = 0
frame = 0
for line in linelist:
    linem = line.split(',')
    frame_n = int(linem[0])
    if frame_n > frame :
        frame = frame+1
        if frame_n != 1:
            allframes.append(x)
        fnum = frame_n%10
        if fnum == 0 :
            fnum = 10
        x = [fnum]
    cha = character(float(linem[2]), float(linem[3]), float(linem[4]),
float(linem[5]))
    x.append(cha)
allframes.append(x)
allparts = []
partnum = -1
frnum = 0
start = 0
for fr in allframes:
    if fr[0] == 1:
        if start != 0 :
            allparts.append(part)
            partnum = partnum + 1
        else :
            start = 1
            partnum = 1
        part = [partnum]
    part.append(fr)
allparts.append(part)
```



图一.视频片段分割

实现计算重叠率

```
#计算两块矩形重叠率
def Aratio(a, b) :
    x1 = a.x
    y1 = a.y
    width1 = a.xl
    height1 = a.yl

    x2 = b.x
    y2 = b.y
    width2 = b.xl
    height2 = b.yl

    endx = max(x1 + width1, x2 + width2)
    startx = min(x1, x2)
    width = width1 + width2 - (endx - startx)

    endy = max(y1 + height1, y2 + height2)
    starty = min(y1, y2)
    height = height1 + height2 - (endy - starty)

    if width <= 0 or height <= 0 :
        ratio = 0
    else :
        Area = width * height
        Area1 = width1 * height1
        Area2 = width2 * height2
        ratio = Area / (Area1 + Area2 - Area)
    return ratio
```

利用公式：

$$V_{overlap} = \frac{S_{share}}{S_t + S_{t+1} - Sshare}$$

实现了两帧之间的目标重叠率的计算。

```
class character:
    def __init__(self, x, y, xl, yl):
        self.x = x
        self.y = y
        self.xl = xl
        self.yl = yl
        self.last = -1
        self.next = -1
'''
```

增加了每个轨迹的前后连接参数，可以标记在上一帧与下一帧中出现的目标的位置。

最后使用上周的算法，实现了帧中每个目标的标记。

存在问题

无法使轨迹展示出来，该次级轨迹的形式不知道是否符合后续计算的要求。