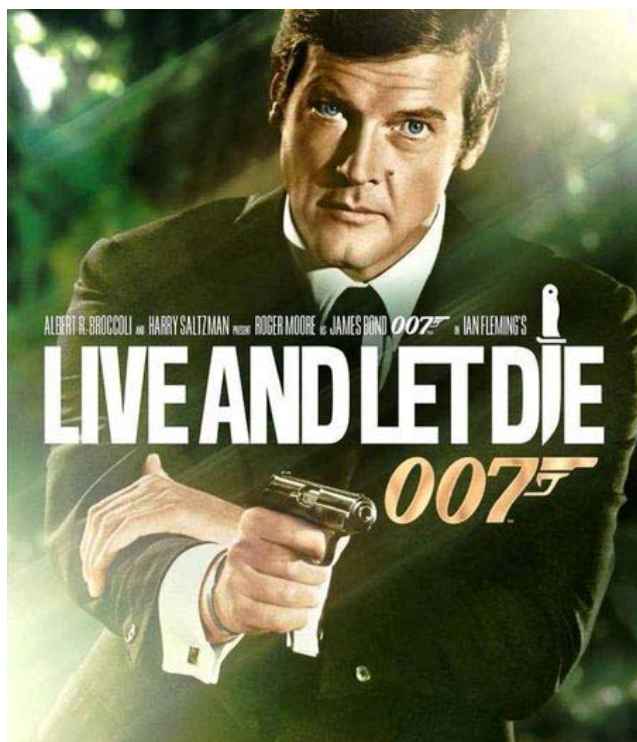
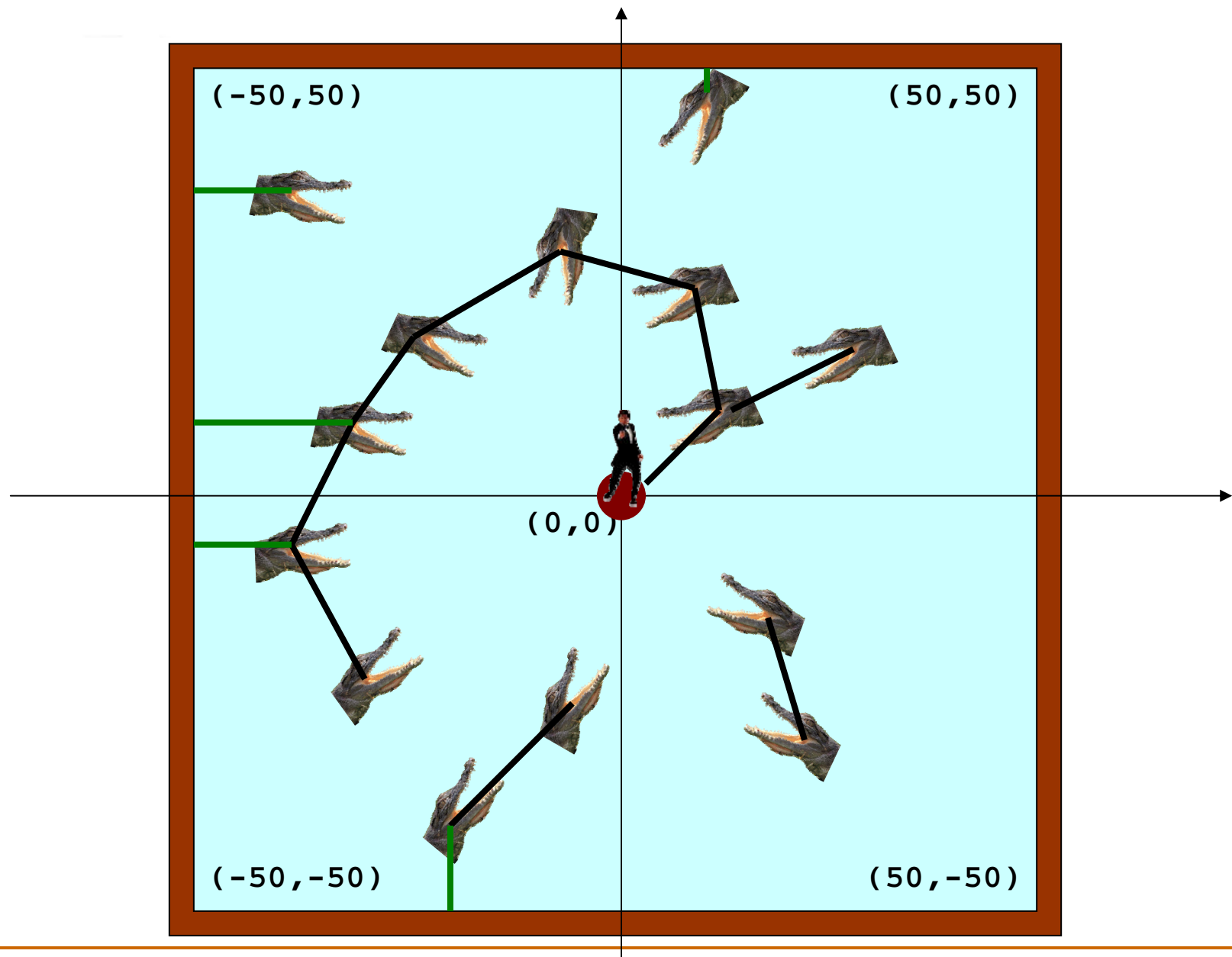


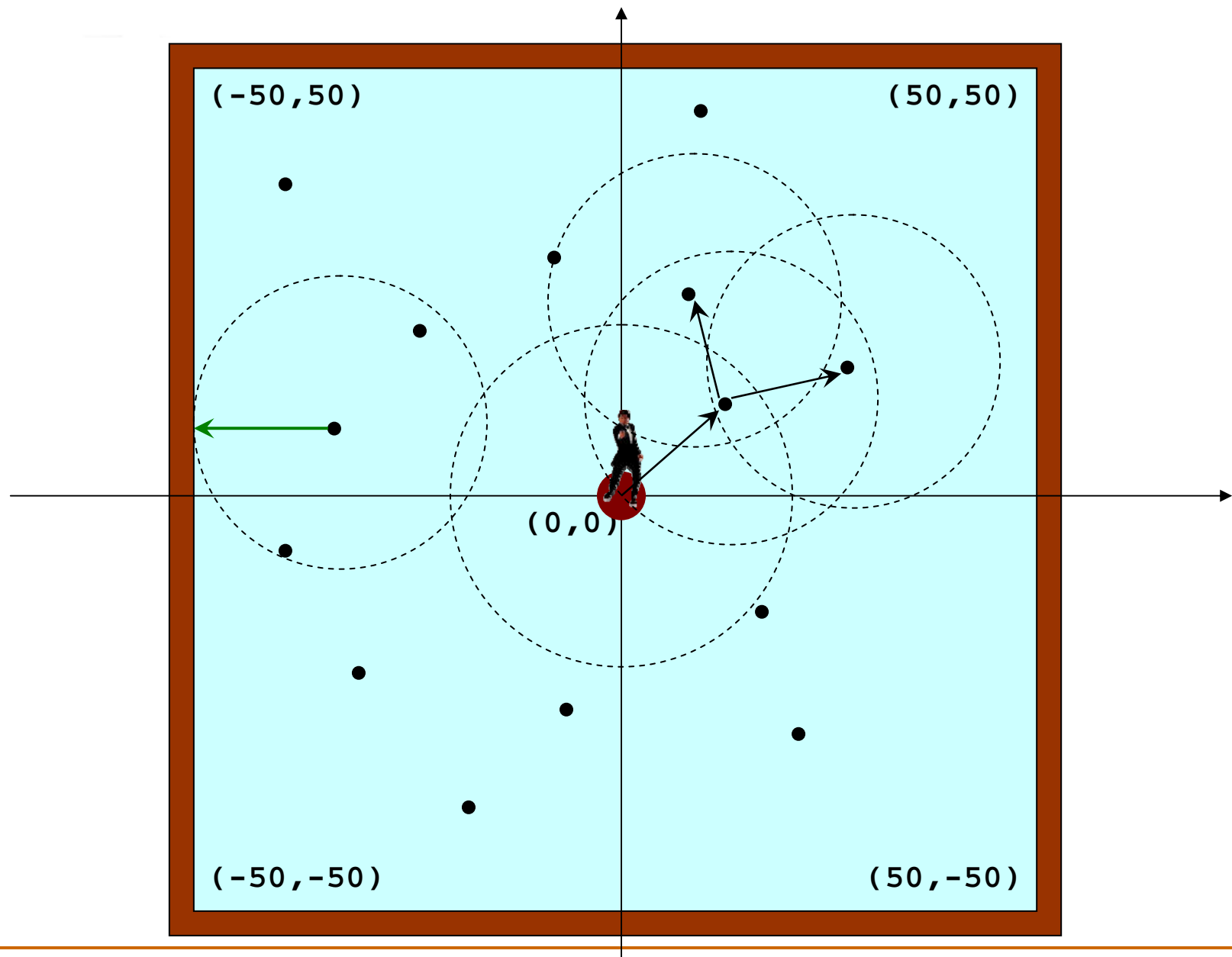
第六讲 图（上）

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6.3 应用实例：拯救 007







总体算法

```
void ListComponents ( Graph G )
{ for ( each V in G )
    if ( !visited[V] ) {
        DFS( V );
    }
}
```

```
void Save007 ( Graph G )
{ for ( each V in G ) {
    if ( !visited[V] && FirstJump(V) ) { visited[V]代表007已经踩过
        answer = DFS( V );
        if ( answer==YES) break;
    }
}
if ( answer==YES) output( "Yes" );
else output( "No" );
}
```

DFS算法

```
void DFS ( Vertex V )
{ visited[V] = true;
  for ( v 的每个邻接点 w )
    if ( !visited[w] )
      DFS(w);
}
```

```
int DFS ( Vertex V )
{ visited[V] = true;
  if ( IsSafe(V) ) answer = YES;  IsSafe(V):判断能否上岸
  else {
    for ( each W in G )
      if ( !visited[W] && Jump(V,W) ) {  Jump(v,m),算一下v和m
        answer = DFS(W);                之间的距离
        if ( answer==YES ) break;
      }
  }
  return answer;
}
```