Population and Community Ecology Homework 2

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Part 1

Tutorial Run-Through

```
library(spatstat)
```

```
## Loading required package: nlme
```

```
## Loading required package: rpart
```

```
##
## spatstat 1.49-0       (nickname: 'So-Called Software')
## For an introduction to spatstat, type 'beginner'
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following object is masked from 'package:nlme':
##
##     collapse
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
data(japanesepines)
summary(japanesepines)
```

```
## Planar point pattern:  65 points
## Average intensity 65 points per square unit (one unit = 5.7 metres)
##
## Coordinates are given to 2 decimal places
## i.e. rounded to the nearest multiple of 0.01 units (one unit = 5.7 metres)
##
## Window: rectangle = [0, 1] x [0, 1] units
## Window area = 1 square unit
## Unit of length: 5.7 metres
```

```
glimpse(japanesepines)
```

```
## List of 5
##  $ window    :List of 4
##   ..$ type  : chr "rectangle"
##   ..$ xrange: num [1:2] 0 1
##   ..$ yrange: num [1:2] 0 1
##   ..$ units :List of 3
```

```
##   .. ..$ singular  : chr "metre"
##   .. ..$ plural    : chr "metres"
##   .. ..$ multiplier: num 5.7
##   .. ..- attr(*, "class")= chr "units"
##   ..- attr(*, "class")= chr "owin"
##  $ n         : int 65
##  $ x         : num [1:65] 0.09 0.29 0.38 0.39 0.48 0.59 0.65 0.67 0.73 0.79 ...
##  $ y         : num [1:65] 0.09 0.02 0.03 0.18 0.03 0.02 0.16 0.13 0.13 0.03 ...
##  $ markformat: chr "none"
##  - attr(*, "class")= chr "ppp"
```