第七周：

```
library(igraph);
d = data.frame(name = c('1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '11', '12', '13', '14'),
    label= c('e1', 'e2', 'e3', 'e4', 'e5', 'e6', 'e7', 'e8', 'e9', 'e10', 'e11', 'e12', 'e13', 'e14')
        )
names(d) = c("name", "label")
relation = data.frame(
    from        = c(1,1,1,1,2,2,2,2, 3,3,3,3, 4,4,4,4,5,6,6, 7,7,7,8,8,8,8,9,9,10,10,10,11,12,12,13),
    to          =
c(5,8,3,6,5,8,3,6,4,6,7,8,5,6,7,8,9,7,9,9,10,12,10,12,13,14,10,12,12,13,14,9,13,14,14),
    weight      = c(1,1,1,1,1,1,1,1,2,2,2,2,2,1,1,1,1,2,2,2,1,2,2,2,1,1,2,2,2,1,1,1,1,1,1)
)
names(relation) <- c('from', 'to','weight')
g = graph.data.frame(relation , vertices=d, directed = FALSE)

V(g)$x = c(0.8,1.5,4.3,3,2,3.5,3.5,4.8,4.3,5.8,4.3,5.5,5.8,6.8)
V(g)$y = c(1.4,1,1.4,2,2.7,0.9,2.8,2,4,3.7,6,2.5,1.3,2)
V(g)$label.font = 2
V(g)$label.color = "black"
plot(g, edge.width = E(g)$weight, vertex.color="green", vertex.shape="square",
    vertex.frame.color="grey", vertex.label.dist=1, vertex.label.degree=pi/2 )
```