[Create a subgraph from the neighborhood of specific vertices in igraph – Maps and Spaces (ourednik.info)](https://ourednik.info/maps/2018/09/21/create-a-subgraph-from-the-neighborhood-of-specific-vertices-in-igraph/)

library(igraph)

# generate a random graph with named vertices

g <- sample\_gnp(1000,0.001,directed = **TRUE**)

V(g)$name <- as\_ids(V(g))

# make a list of the names of the nodes of interest

nodes\_of\_interest <- c("1","200","123","590","10","12")

# select the nodes having these names

selnodes <- V(g)[name %in% nodes\_of\_interest]

# get their network neighborhood

selegoV <- ego(g, order=1, nodes = selnodes, mode = "all", mindist = 0)

# turn the returned list of igraph.vs objects into a graph

selegoG <- induced\_subgraph(g,unlist(selegoV))

# plot the subgraph

plot(selegoG,vertex.label=V(selegoG)$name)