11.1.1(a)

m,h,l,p

11.1.1(b)

g,f,e,d,a,b,c

11.1.1(c)

j,q,n,a,b,c,g

11.1.1(h)

k,l

11.2.1(a)

Graphical user interface, application

Description automatically generated

11.2.2(c)

den

11.3.2(b)

Graphical user interface, application

Description automatically generated

11.4.1(a)

f,I,h,e,b,g,c,a,d

11.4.1(b)

d,f,b,h,e,a,c,g

11.5.1(a)

A picture containing scatter chart

Description automatically generated

11.6.1(a)

A picture containing graphical user interface

Description automatically generated

minimum weight = 15

11.6.1(b)

A picture containing graphical user interface

Description automatically generated

minimum weight = 18

11.6.1(c)

step 1: draw out the minimum weight tree using Prim’s algorithm.

step 2: attach the edge {u,v}

step 3: remove any edges attached to vertex u or v that create a cycle

step 4: add new edges to vertex u or v so that the tree is complete using Prim’s algorithm starting at vertex u or v