

REPORT

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GRAPH

LAB 09

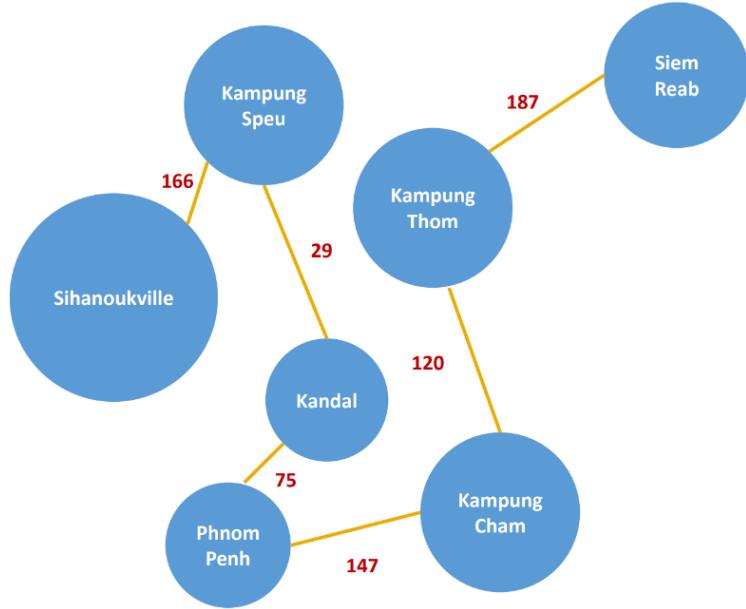


Consider the graph representation location between provinces and cities in the Graph lecture note.

1-Represent this province location graph using edge list representation.

2-Represent this graph using adjacency matrix. Let's draw this matrix

3-Represent this graph using adjacency list. Let's draw this matrix.



Sihanoukville = SHV, Kampong Speu = KPS, Kandal = KD, Phnom Penh = PP
Kampong Cham = KPC, Kampong Thom = KPT, Siem Reap = SR

1- Represent this province location graph using edge list representation.

+ Edge List

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[ (SHV,KPS,166), (KPS,SHV,166), (KPS,KD,29),
(KD,KPS,29), (KD,PP,75), (PP,KD,75), (PP,KPC,147),
(KPC,PP,147), (KPC,KPT,120),
(KPT,KPC,120), (KPT,SR,187),
(SR,KPT,187) ]
```

2- Represent this graph using adjacency matrix. Let's draw this matrix

		SHV	KPS	KD	PP	KPC	KPT	SR
SHV		0	166	0	0	0	0	0
KPS		166	0	29	0	0	0	0
KD		0	29	0	75	0	0	0
PP		0	0	75	0	147	0	6
KPC		0	0	0	147	0	120	0
KPT		0	0	0	0	120	0	187
SR		0	0	0	0	0	187	0

3- Represent this graph using adjacency list. Let's draw this matrix.

<u>Adjacency List</u>	
Date.	No.
SHV →	KPS 166
KPS →	SHV 166 , KD 29
KD →	KPS 29 , PP 75
PP →	KD 75 , KPC 147
KPC →	PP 147 , KPT 120
KPT →	KPC 120 , SR 187
SR →	KPT 187