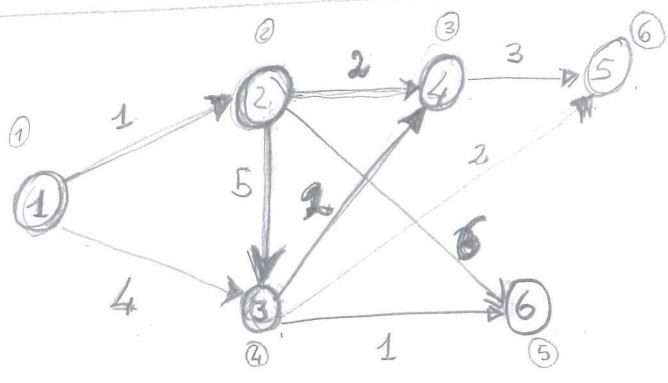


SHORTEST PATH



DIJKSTRA + PQ

Priority Queue

1	2	3	4	5	6
N	N	N	N	N	N

PARENT ARRAY

$\pi(s) = \emptyset$, $\pi(v) = \infty$

Step 1

Selected Node: ①

Update costs: $\pi(2) = 1$, $\pi(3) = 4$

①	2	3	4	5	6
N	1	1	N	N	N

Step 2

Selected Node: ②

Update costs: $\pi(4) = 3$, $\pi(6) = 7$

①	②	3	4	5	6
N	1	1	2	N	2

Step 3

Selected Node: ④

Update costs: $\pi(5) = 6$

①	②	3	④	5	6
N	1	1	2	4	2

Step 4

Selected Node: ③

Update cost: $\pi(6) = 5$

①	②	③	④	⑤	⑥
N	1	1	2	4	3

Step 5

Selected Node: ⑥

Spanning Tree

