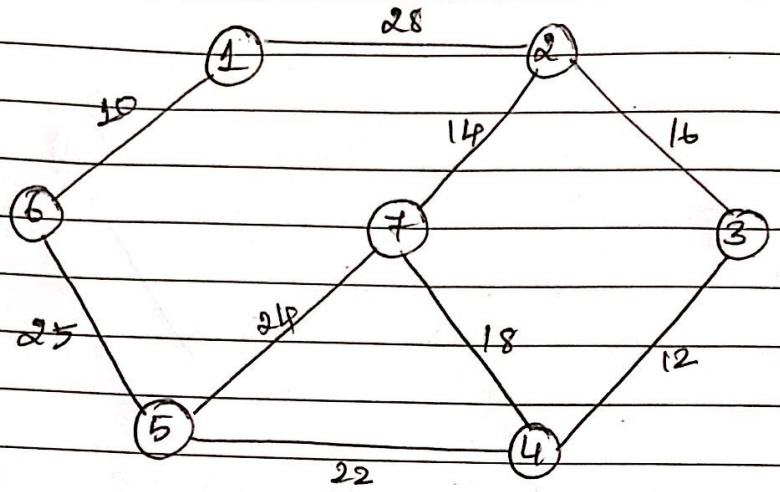
Prim's Algorithm Assignment



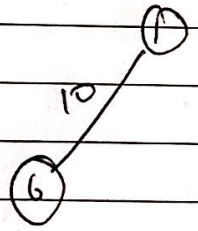
Step 1 :-

sub = {a}

RV = {2, 3, 4, 5, 6, 7}

LE = {(1,6)}

Step 2 :-

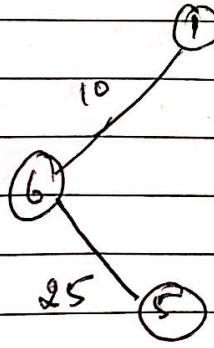


sub = {1, 6}

RV = {2, 3, 4, 5, 7}

S = {(1,6)}, LE = {(6,5)}

Step 3 :



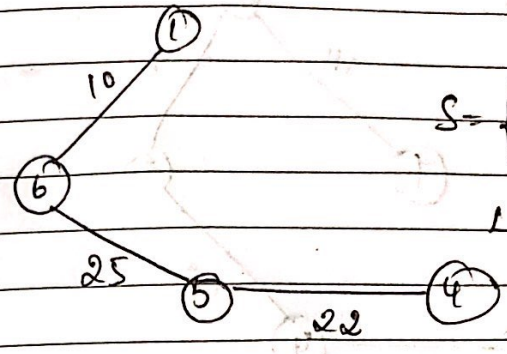
sub = {1, 6, 5}

RV = {2, 3, 4, 7}

S = {(1,6), (6,5)}

LE = {(5,4)}

Step 4 :-



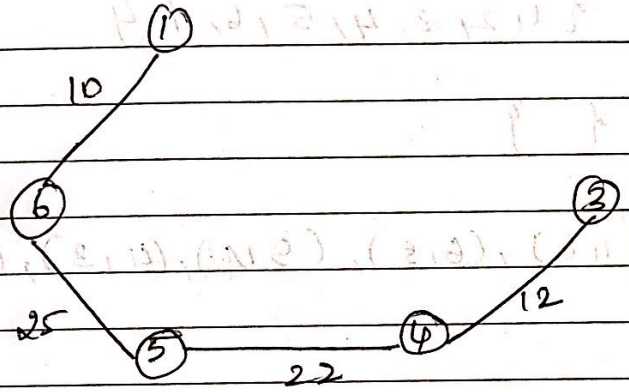
sub = {1, 6, 5, 4}

RV = {2, 3, 7}

S = {(1,6), (6,5), (5,4)}

LE = {(4,3)}

Step 5



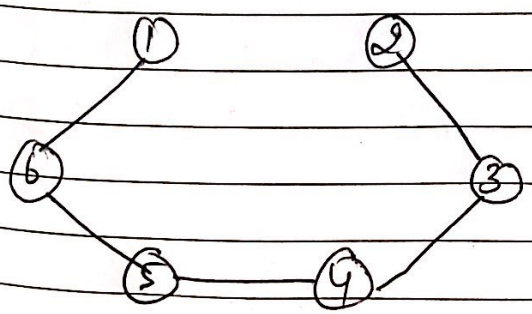
sub = {1, 6, 5, 4, 3}

RV = {2, 7}

S = {(1,6), (6,5), (5,4), (4,3)}

LE = {(3,2)}

Step 6:



sub = {1, 6, 5, 4, 3, 2}

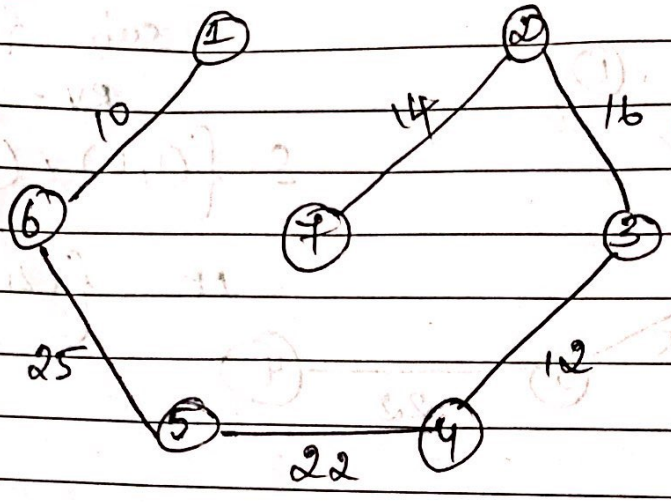
RV = {7}

S = {(1,6), (6,5), (5,4), (4,3), (3,2)}

LE = {(2,7)}

Date: / /

Step-1:



⇒ MST

sub = {1, 2, 3, 4, 5, 6, 7}

RV = { }

S = {(1,6), (6,5), (5,4), (4,3), (3,2), (2,7)}

MST Value = 10 + 25 + 22 + 12 + 16 + 14 = 99.