

# **MATHS SCRIBED NOTES**

**16-11-2022**

**STUDENT ID's :**

**202212036**

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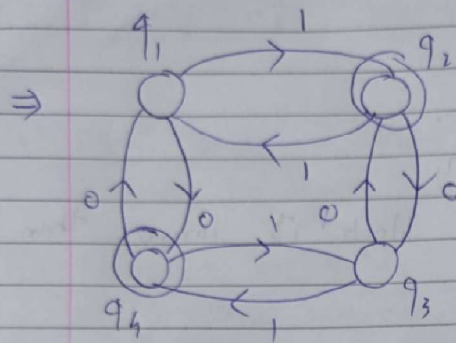
**202212039**

**202212040**

- **FLOYD WARSHALL ALGORITHM**

**FORMULA :**

$$\mathbf{DPT_k [i,j] = DPT_{k-1} [i,j] + (DPT_{k-1} [i,k]) . (DPT_{k-1} [k,k])^* . (DPT_{k-1} [k,j])}$$



DPT = Dynamic Programming table

	$q_1$	$q_2$	$q_3$	$q_4$
$q_1$	$\epsilon$	1	$\emptyset$	0
$q_2$	1	$\epsilon$	0	$\emptyset$
$q_3$	$\emptyset$	0	$\epsilon$	1
$q_4$	0	$\emptyset$	1	$\epsilon$

$q_1$   
intermediate

	$q_1$	$q_2$	$q_3$	$q_4$
$q_1$	$\epsilon$	1	$\emptyset$	0
$q_2$	1	$11 + \epsilon$	$0 + \epsilon$	10
$q_3$	$\emptyset$	0	$\epsilon$	1
$q_4$	0	01	1	$\epsilon + 00$