Name: Muhammad Shehjeel Akhtar
Roll No: 20p-0101
Section: BCS-6C

⇒ Start ⇐

Assignment No: 1
Submitted To Respected Sir: Dr. Usman Abbasi

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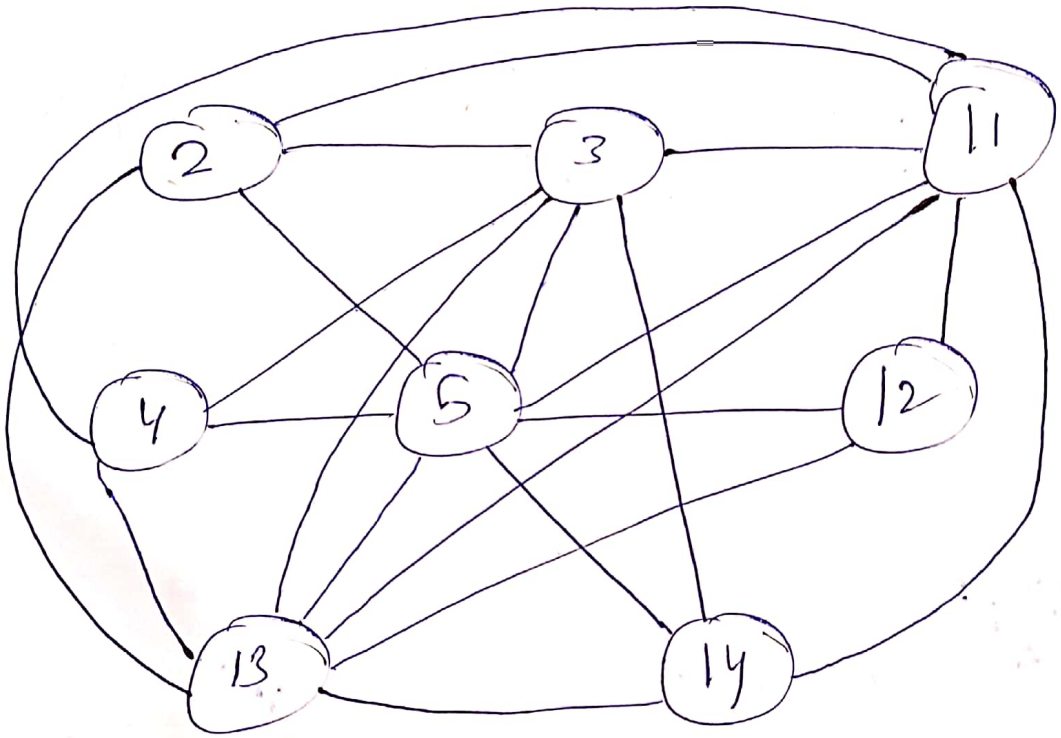
Question 1: Draw a graph..... What is the total no of edges?

Answer: $V(G) = \{2, 3, 4, 5, 11, 12, 13, 14\}$



Sum of deg = 42

E = 21

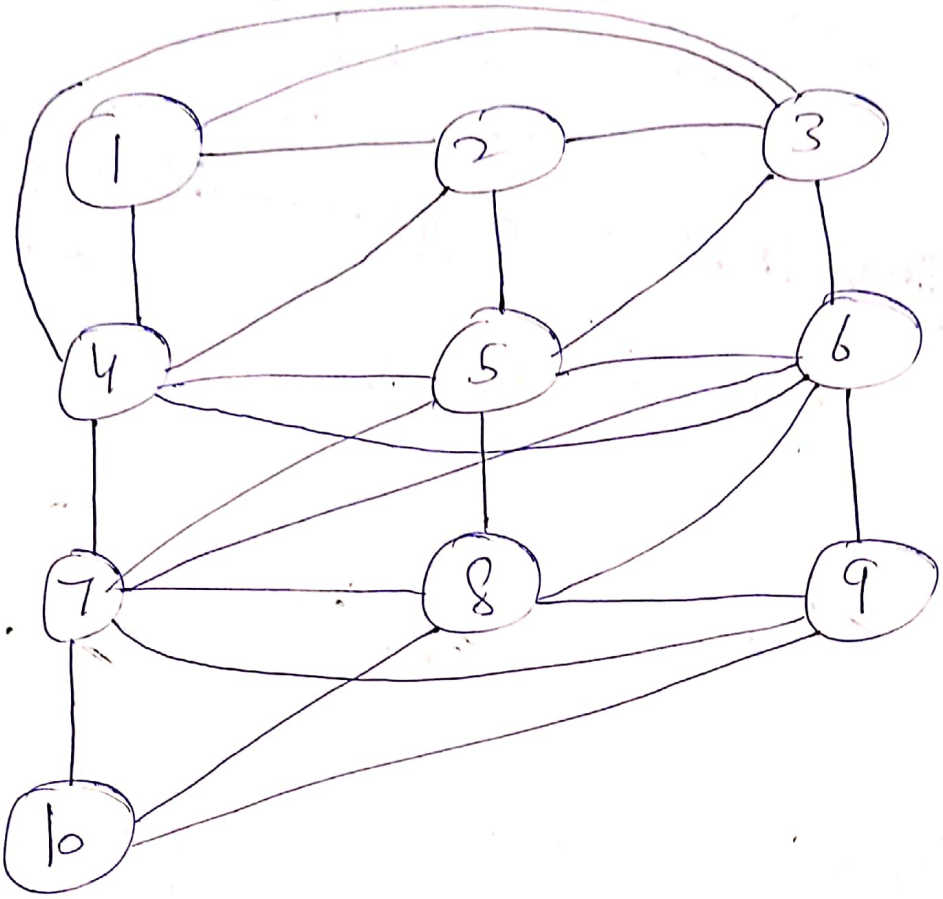
Total edges =

deg (2) = 4
deg (3) = 6
deg (4) = 4
deg (5) = 7
deg (12) = 3
deg (13) = 7
deg (14) = 4

o—o

Question :02 : Draw a graph ..... number of edges ?

Answer : $V(G) = \{1, 2, \ldots, 10\}$ $(i-j<3)$



Degrees

$\deg(1) = 3$
$\deg(2) = 4$
$\deg(3) = 5$
$\deg(4) = 6$
$\deg(5) = 6$
$\deg(6) = 6$
$\deg(7) = 6$
$\deg(8) = 5$
$\deg(10) = 3$
$\deg(9) = 4$

$2 \rightarrow 48$

$E = \frac{48}{2} = 24$

Question : Q3. Draw a graph G.... number of edges? (2)

Answer: $G = \{1, \ldots, 10\}$ $i+j$ is multiple of 4

Degrees:

degree(1) = 2

degree(2) = 2

degree(3) = 3

degree(4) = 1

degree(5) = 2

degree(6) = 2

degree(7) = 3

degree(8) = 1

degree(9) = 2

degree(10) = 2/20

$$E = \frac{20}{2} = 10$$