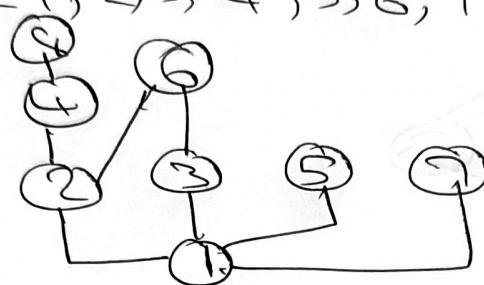


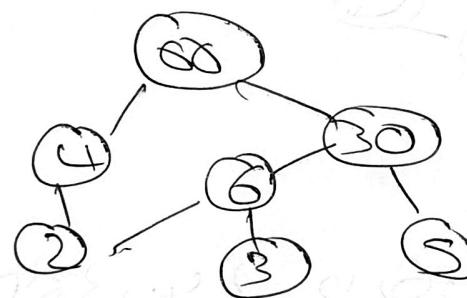
i) Draw a hasse diagram for (A), divisibility where relation

ii) $A = \{1, 2, 3, 4, 5, 6, 7, 8\}$

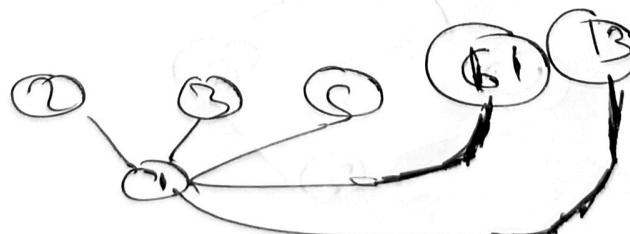


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iii) $A = \{2, 3, 4, 5, 30, 60\}$



iv) $A = \{1, 2, 3, 5, 11, 13\}$



i) $\Delta = \{1, 2, 3, 6, 12, 24\}$

```

graph TD
    1((1)) --> 2((2))
    1((1)) --> 3((3))
    1((1)) --> 6((6))
    2((2)) --> 12((12))
    3((3)) --> 12((12))
    6((6)) --> 12((12))
    6((6)) --> 24((24))
    12((12)) --> 24((24))
    12((12)) --> 24((24))

```

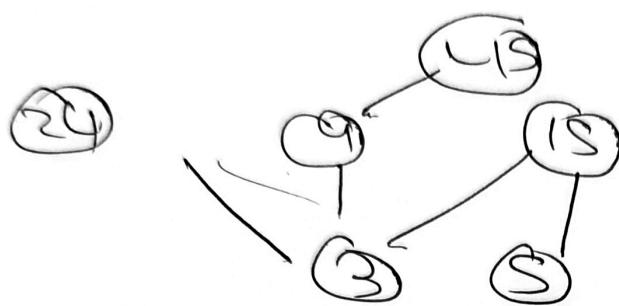
v) $A = \{1, 2, 4, 8, 16, 32, 64\}$

(vii) $A = \{2, 4, 6, 12, 24, 36\}$

```

graph TD
    A((12)) --> B((2))
    A((12)) --> C((2))
    A((12)) --> D((2))
    A((12)) --> E((2))
    B --> B
    C --> C
    D --> D
    E --> E
  
```

2) Consider the poset $\{23, 59, 15, 24, 45\}$ by divisibility relation



i) Find its maxima, minima, greatest and least elements if exist

Max 24, 25 greatest D.N.E
Min 3, 5, least D.N.T

ii) Find maxima and minima greater and least elements of set $N = \{23, 9, 15\}$, when they exist

Max 9, 15 greatest D.N.E, min - } least 3