Q.1 Write a scoreboard logic for below scenario :

In a soc, total 6 Ips are connected with given hierarchy. Starting from IP1 packet is forwarded to downside based on address. Also at each level first byte of address got dropped. Write a scoreboard check to confirm packets forwarded to correct IPs.



A diagram of a computer network

Description automatically generated

**Address levels :**

**IP1 -> FFFF\_0000 to FF00\_0000**

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**IP2-> FF\_0000 to FF\_1000**

**IP3-> FF\_2000 to FF\_3000**

**IP4-> FF\_4000 to FF\_5000**

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**IP6-> FF00 to FF10**

**IP7-> FF20 to FF30**