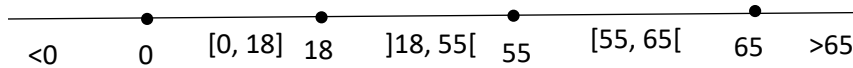


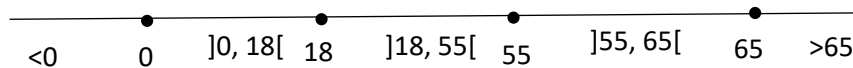
Lab 3

Ali Fahd 101107270

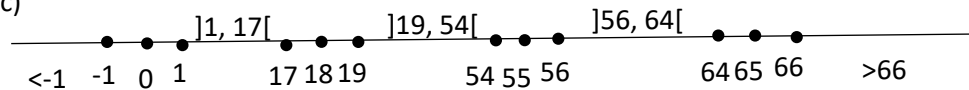
1. a) This will lead us to select 6 test inputs.



- b) This will lead us to select 9 test inputs.

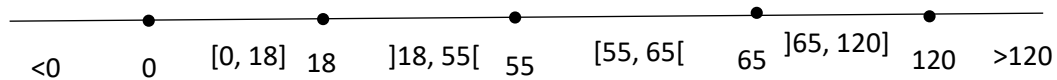


- c)



This will lead us to select 17 test inputs.

2. We will need 7 inputs; this differed from question 1.a as another range has been added of]65, 120].



3. I would be the best option as it meets all the requirements:

- **-150 < -5**
- **-5 = -5**
- **-5 < 30 ≤ 30**
- **30 < 45**

A, B, C, E, F won't work as they do not have exactly -5.

D does not have a value less than -5.

G does not have a value greater than 30.

H works but it has more inputs so it is more costly.

4. 1.

S1: the players score is less than 50.

S2: the players score is greater than or equal to 50.

- 2.

L1: The players number of remaining lives is greater than 3.

L2: The players number of remaining lives is less than 3.

3.

There are 2 possible combinations: S2, L1 and S2, L2.

4.

(Assuming you start with 50 points).

S2, L1) Score: 150 Lives: 3

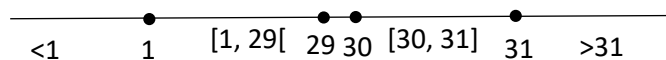
S2, L2) Score: 80 Lives: 2

5. Month: 12 is not included so December would never be an option (not complete).

Day: 1 is overlapped as it appears in Day 2 and Day 3 (not disjoint). Also, there is not options for greater than 31 (not complete).

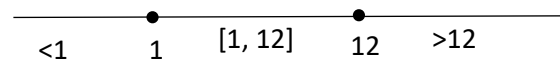
6. Day:

- Day 1: <1
- Day 2: ≥ 1 and <29
- Day 3: 29
- Day 4: ≥ 30 and ≤ 31
- Day 5: >31



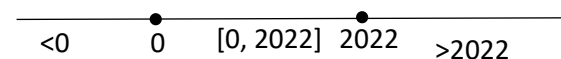
Month:

- Month 1: <1
- Month 2: ≥ 1 and ≤ 12
- Month 3: >12



Year:

- Year 1: <0
- Year 2: ≥ 0 and ≤ 2022
- Year 3: >2022



Assume that negative years are invalid and years beyond 2022.