

I will provide a set of logical rules L1 to L28 and facts F1 to F63. Please select one single logical rule from L1 to L28 and a few facts from F1 to F63 to explain the following statement.

Rules:

- L1: $\forall A, B, C : r1(B, A) \wedge r1(B, C) \wedge r44(A) \rightarrow r2(A, C)$
 L2: $\forall A, B, C : r1(B, A) \wedge r1(B, C) \wedge r43(A) \rightarrow r3(A, C)$
 L3: $\forall A, B : r1(A, B) \wedge r44(A) \rightarrow r4(A, B)$
 L4: $\forall A, B : r1(A, B) \wedge r43(A) \rightarrow r5(A, B)$
 L5: $\forall A, B, C : r1(A, B) \wedge r1(B, C) \wedge r44(A) \rightarrow r6(A, C)$
 L6: $\forall A, B, C : r1(A, B) \wedge r1(B, C) \wedge r43(A) \rightarrow r7(A, C)$
 L7: $\forall A, B, C, D : r1(A, B) \wedge r1(B, C) \wedge r1(C, D) \wedge r44(A) \rightarrow r8(A, D)$
 L8: $\forall A, B, C, D : r1(A, B) \wedge r1(B, C) \wedge r1(C, D) \wedge r43(A) \rightarrow r9(A, D)$
 L9: $\forall A, B, C, D : r1(B, A) \wedge r1(B, C) \wedge r1(C, D) \wedge r44(A) \rightarrow r10(A, D)$
 L10: $\forall A, B, C, D : r1(B, A) \wedge r1(B, C) \wedge r1(C, D) \wedge r43(A) \rightarrow r11(A, D)$
 L11: $\forall A, B, C, D, E : r1(B, A) \wedge r1(B, C) \wedge r1(C, D) \wedge r1(D, E) \wedge r44(A) \rightarrow r12(A, E)$
 L12: $\forall A, B, C, D, E : r1(B, A) \wedge r1(B, C) \wedge r1(C, D) \wedge r1(D, E) \wedge r43(A) \rightarrow r13(A, E)$
 L13: $\forall A, B, C, D, E, F : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r1(D, E) \wedge r1(E, F) \wedge r44(A) \rightarrow r14(A, F)$
 L14: $\forall A, B, C, D, E, F : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r1(D, E) \wedge r1(E, F) \wedge r43(A) \rightarrow r15(A, F)$
 L15: $\forall A, B, C, D, E : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r1(D, E) \wedge r44(A) \rightarrow r16(A, E)$
 L16: $\forall A, B, C, D, E : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r1(D, E) \wedge r43(A) \rightarrow r17(A, E)$
 L17: $\forall A, B, C, D, E, F, G : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r1(D, E) \wedge r1(E, F) \wedge r1(F, G) \wedge r44(A) \rightarrow r18(A, G)$
 L18: $\forall A, B, C, D, E, F, G : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r1(D, E) \wedge r1(E, F) \wedge r1(F, G) \wedge r43(A) \rightarrow r19(A, G)$
 L19: $\forall A, B, C, D, E, F : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r1(D, E) \wedge r1(E, F) \wedge r44(A) \rightarrow r20(A, F)$
 L20: $\forall A, B, C, D, E, F : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r1(D, E) \wedge r1(E, F) \wedge r43(A) \rightarrow r21(A, F)$
 L21: $\forall A, B : r1(B, A) \wedge r44(A) \rightarrow r22(A, B)$
 L22: $\forall A, B : r1(B, A) \wedge r43(A) \rightarrow r23(A, B)$
 L23: $\forall A, B, C : r1(B, A) \wedge r1(C, B) \wedge r44(A) \rightarrow r24(A, C)$
 L24: $\forall A, B, C : r1(B, A) \wedge r1(C, B) \wedge r43(A) \rightarrow r25(A, C)$
 L25: $\forall A, B, C, D : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r44(A) \rightarrow r26(A, D)$

L26: $\forall A, B, C, D : r1(B, A) \wedge r1(C, B) \wedge r1(D, C) \wedge r43(A) \rightarrow r27(A, D)$

L27: $\forall A, B, C, D : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r44(A) \rightarrow r28(A, D)$

L28: $\forall A, B, C, D : r1(B, A) \wedge r1(C, B) \wedge r1(C, D) \wedge r43(A) \rightarrow r29(A, D)$

Facts:

F1: $r1(\text{Laura}, \text{Fabian})$

F2: $r1(\text{Laura}, \text{Felix})$

F3: $r1(\text{Laura}, \text{Claudia})$

F4: $r1(\text{Elias}, \text{Fabian})$

F5: $r1(\text{Elias}, \text{Felix})$

F6: $r1(\text{Elias}, \text{Claudia})$

F7: $r1(\text{Alina}, \text{David})$

F8: $r1(\text{Alina}, \text{Lea})$

F9: $r1(\text{Nico}, \text{David})$

F10: $r1(\text{Nico}, \text{Lea})$

F11: $r1(\text{Emily}, \text{Nico})$

F12: $r1(\text{Konstantin}, \text{Nico})$

F13: $r1(\text{Fabian}, \text{Thomas})$

F14: $r1(\text{Fabian}, \text{Amelie})$

F15: $r1(\text{Nina}, \text{Tobias})$

F16: $r1(\text{Leonie}, \text{Emily})$

F17: $r1(\text{Stefan}, \text{Emily})$

F18: $r1(\text{Gabriel}, \text{Tobias})$

F19: $r1(\text{Elena}, \text{Thomas})$

F20: $r1(\text{Elena}, \text{Amelie})$

F21: $r1(\text{Thomas}, \text{Helga})$

F22: $r1(\text{Thomas}, \text{Nina})$

F23: $r1(\text{Thomas}, \text{Patrick})$

F24: $r1(\text{Luisa}, \text{Helga})$

F25: $r1(\text{Luisa}, \text{Nina})$

F26: $r1(\text{Luisa}, \text{Patrick})$

F27: $r1(\text{Patrick}, \text{Samuel})$

F28: $r1(\text{Patrick}, \text{Alina})$

F29: $r1(\text{Patrick}, \text{Jonathan})$

F30: $r1(\text{Patrick}, \text{Philipp})$

F31: $r1(\text{Patrick}, \text{Florian})$

F32: $r1(\text{Emilia}, \text{Samuel})$
 F33: $r1(\text{Emilia}, \text{Alina})$
 F34: $r1(\text{Emilia}, \text{Jonathan})$
 F35: $r1(\text{Emilia}, \text{Philipp})$
 F36: $r1(\text{Emilia}, \text{Florian})$
 F37: $r44(\text{Laura})$
 F38: $r43(\text{Elias})$
 F39: $r43(\text{Fabian})$
 F40: $r44(\text{Claudia})$
 F41: $r44(\text{Elena})$
 F42: $r43(\text{Thomas})$
 F43: $r44(\text{Amelie})$
 F44: $r44(\text{Luisa})$
 F45: $r43(\text{Patrick})$
 F46: $r44(\text{Emilia})$
 F47: $r43(\text{Samuel})$
 F48: $r44(\text{Alina})$
 F49: $r43(\text{Jonathan})$
 F50: $r43(\text{Philipp})$
 F51: $r43(\text{Nico})$
 F52: $r43(\text{David})$
 F53: $r44(\text{Emily})$
 F54: $r43(\text{Konstantin})$
 F55: $r43(\text{Florian})$
 F56: $r44(\text{Helga})$
 F57: $r44(\text{Nina})$
 F58: $r44(\text{Lea})$
 F59: $r43(\text{Felix})$
 F60: $r44(\text{Leonie})$
 F61: $r43(\text{Stefan})$
 F62: $r43(\text{Gabriel})$
 F63: $r43(\text{Tobias})$

Statement: $r24(\text{Lea}, \text{Patrick})$

Answer with the numbers of the selected rule and facts. The selected rule and facts are (There may be multiple explanations for the statement, please provide one):