Task P3.1.2

Question

Training

P_Code	P_Name	Instructor	Term	Duration (Hrs)	Hourly_Rate	Room_NO
P1	Visual Basic	Dennis	15-1	7	20	A1
P1	Visual Basic	Dennis	15-2	7	30	A2
P2	SQL	Jason	15-1	4	10	A4
P2	SQL	Jason	15-2	4	20	A5
P3	C++	Joseph	15-1	5	30	A3
P3	C++	Joseph	15-2	5	20	A7
P4	Java	Rys	15-2	6	10	A9

Identify the most suitable **primary key** for the table above and explain how this key uniquely defines all other attributes.

Answer:

Combination of "P_Code" and "Room_NO"

In this example each Room_NO is unique but, for the larger datasets there can be **repetition** in Room_NO as well so to make each primary key unique (for the larger dataset as well) I choose the Combination of "P_Code" and "Room_NO".

Secondly, the primary key should be something which is **most efficient to search** through like an integer but in this case, it is not possible so I choose attribute with least amount of alphabets in it to make the process of querying database quicker .

Primary key must not contain any null values, and this combination exclude that possibility as well for larger dataset.