|  |
| --- |
| **P12\_4** |
| +answer: int  +name: String |
| Main() |

|  |  |
| --- | --- |
| **P12\_4** | |
| *Get Player Name* | Scanner |
| *Start Game* | Player |

|  |
| --- |
| **ProblemGenerator** |
| -a: int  -b: int  -answer: int |
| +newProblem(int): String  +getProblem(int): String  +getAnswer(): int |

|  |
| --- |
| **Player** |
| -score: int  -tries: int  -name: String  -problems: ProblemGenerator  -gameSet: Game |
| +getLevel(): int  +getScore(): int  +getProblem(): String  +morePlay(int): boolean |

|  |
| --- |
| **Game** |
| -level: int  -maxScore: int |
| +getMax(int): int  +changeLevel()  +getLevel(): int |

|  |  |
| --- | --- |
| **Game** | |
| *Sets/Changes Level* |  |
| *Returns Level Up Conditions* |  |

|  |  |
| --- | --- |
| **ProblemGenerator** | |
| *Generates Problems* |  |
| *Returns Problem Generated* |  |
| *Returns Correct Answer* |  |

|  |  |
| --- | --- |
| **Player** | |
| *Returns Current Level* | Game |
| *Returns Current Score* |  |
| *Returns Current Problem* | ProblemGenerator |
| *Checks if the game should continue and generates new problems* | Game  ProblemGenerator |