



Creation

Created Tool

`solve_equations(equations)`

Documentation

Solves a system of linear equations using `numpy.linalg.solve`;
Takes in a list of equations in the form of 2D arrays;
Returns a list of the solutions to the system.

Realization

```
coefficients = []
constants = []
for eq in equations:
    coefficients.append(eq[:-1])
    constants.append(eq[-1])
solution = np.linalg.solve(coefficients,
                           constants)
```

Query

Given the equations $3x+y=17$, $5y+z=14$ and $3x+5z=41$, what is the value of the sum $x+y+z$?



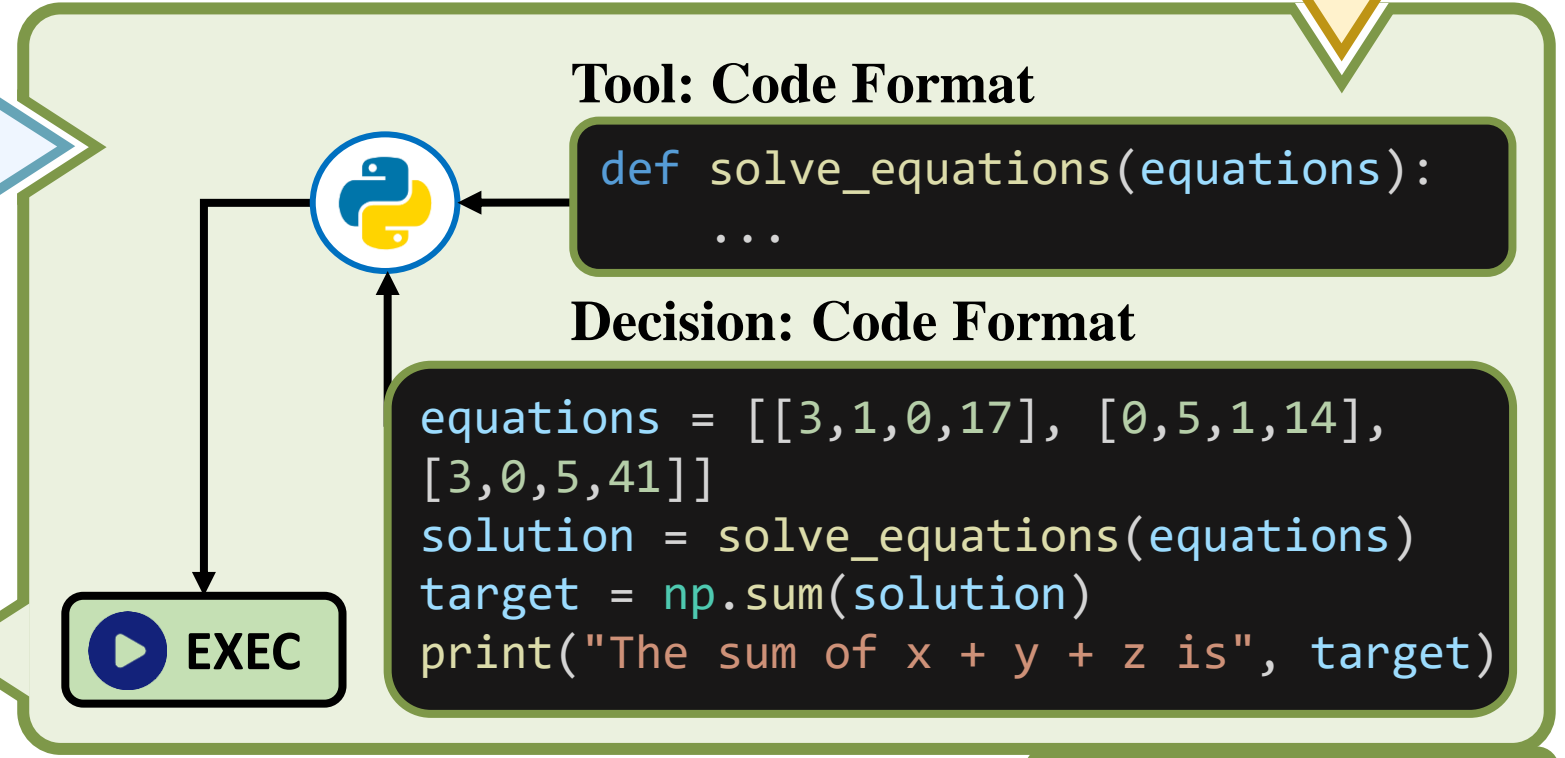
Decision

Make Decisions about How to Apply the Tool

1. Use the tool to get the solution for equation system
2. Take the sum over the solutions to find the answer

Decision

`solution = solve_equations(equations)`
`target = sum(solution)`



If **Error** Occurs:

Traceback:
At line
(Error Reasons)

If **Success**:

Printed:
The result of
 $x + y + z$ is 12

Execution



Answer

The Answer for this Query is 12.



Rectification