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A heuristic is an approach to problem solving where it uses logical approaches to solving a problem. This program makes use of the heuristic approach to problem solving to solve crypto problems of order 5. Heuristics are a great way to solve problems. A heuristic is defined as “a mental shortcut that allows people to solve problems and make judgments quickly and efficiently”. I think that definition holds true to how heuristics were used to solve crypto problems. The heuristics that were generated in this program were made by a human who thought of the fastest and easiest way to solve a crypto problem easily and quickly which is the whole point of a heuristic. This program takes eight heuristics and attempts to make the heuristics applicable, hexecutable, and implementable all at the same time.

Applicability is how much a heuristic is applicable to a vast array of problems. For instance, if random crypto problems were generated, the number of times a heuristic would be fired is a good applicability test. Hexecutability is the ability for a human to easily understand the heuristic. Implementability is the ability to easily implement the heuristic. With that being said, the implemented heuristics kept that in mind. The first part of a heuristic are the situations. Situations are the “if” part of the heuristic where each condition must be met before the heuristic is implemented. For example, Heuristic 4 states that the goal must be two, zero must be in the numbers, and there must be two adjacent pairs. If all the situations have not been met then Heuristic 4 will not be used to solve the crypto problem. After all the situations have been met, then the action will be performed to satisfy the goal. The demo consists of 100 random crypto problems. This demo is a good test of applicability because it shows how many heuristics were fired. In the demo I put on my website, about five out of the eight of my heuristics were actually fired. This test shows that some of my heuristics are unfortunately not very applicable.

The heuristics that were generated in my program keeps in mind applicability, executability, and implementability. When looking at each heuristic generated in this program it is very easy to understand and implement. A human can easily derive a solution for a crypto problem based on the heuristics of this program. This is what makes the Heuristics generated in this program so great. It keeps the way a human would solve the problem in mind by not overloading the conditions of the situation. By doing this it makes the heuristics very executable, and implementable.