

There is an ancient game both in China and Japan. In Chinese, we call it “seven smart board”, while in English, it is called “Tangram”. China’s “seven smart boards” uses seven triangles to patch up different characters, animals and buildings, etc. Because of its scientific designing, smart conception, varieties, and the ability of activating imaginary thinking, especially can enlighten children’s wisdom, it is so popular.

The subject of this year’s game is how to use modern computer technology to conduct players patch up an irregular wall. Obviously, the game is a combination of classicism and modernism.

We use C++ language, dynamic programming, backtracking algorithmic to bid and jigsaw. In the course of the game, we co-operate bidding and jigsaw, hoping to use the least TSUYAMA to patch up the best gram.

1 algorithm

Using improved backtracking algorithmic carry out patching up, dynamic programming to conduct bidding.

2 flow path

- 1) input basic information
- 2) give out the of bidding information
- 3) input the information of bidding result
- 4) give out patching up suggestion
- 5) loop 2) to 4) until the last time bidding

3 strategy

Every time before giving out bidding information, calculate the importance of every kind of stone through simulated patching up. Then choose the suitable bidding price and sequence for the stones which are going to buy according to the quantities and antagonist situation etc.